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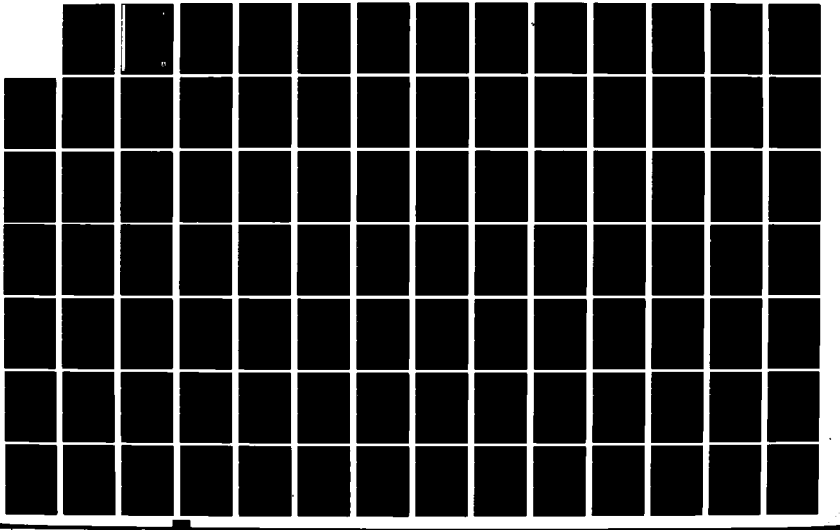

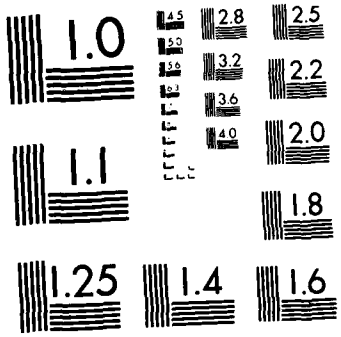

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A Compendium of Theoretical Atmospheric Tidal Structures

Part I: Model Description and Explicit Structures Due to Realistic Thermal and Gravitational Excitation

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24 June 1982

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20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

This report documents the equations, coefficient parameterizations, method of numerical solution, and results from a theoretical (numerical) model of atmospheric tidal oscillations from the surface to 400 km. The westerly, northerly, and vertical winds and temperature are governed by four second order partial differential equations derived from the perturbation fluid equations for momentum, continuity, thermal energy, and the ideal gas law applied to a spherical, rotating, viscous atmosphere with anisotropic ion drag. The equations represent perturbations about a basic atmospheric state

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20. Abstract (Contd)

with latitude- and height-dependent mean winds, temperature, and composition. Model parameterizations described include mean winds and temperatures, molecular and eddy viscosity and thermal conductivity, ion-neutral collision frequency for momentum transfer, and solar thermal and lunar gravitational forcing. Thermal excitation occurs via absorption of EUV and UV radiation in the thermosphere, H_2O insolation absorption in the troposphere and lower stratosphere, and O_3 insolation absorption in the mesosphere. Ion-neutral coupling provides an important semidiurnal momentum source in the F-region. In addition, extensive tabulations and figures representing numerical solutions of diurnal and semidiurnal temperatures and winds every 6° of latitude from the surface to 400 km are presented for equinox and solstice conditions.

Contents

Contents

Illustrations

Illustrations

Tables

Tables

A Compendium of Theoretical Atmospheric Tidal Structures

Part I. Model Description and Explicit Structures Due to Realistic Thermal and Gravitational Excitation

1. INTRODUCTION

The first in a series dealing with results from a comprehensive numerical model of tidal oscillations in the earth's atmosphere, this report documents the equations and boundary conditions, method of solution, and model parameterizations of background winds, temperature, and composition, hydromagnetic coupling, eddy and molecular diffusion, and tidal forcing mechanisms utilized in the model. In addition, calculated results for the diurnal and semidiurnal tides from the surface to 400 km at every 6^{o} latitude for equinox and solstice conditions are presented in Appendix B. Forthcoming reports in this series deal with new results concerning the seasonal-latitudinal and solar cycle variations in thermospheric tides, and the simulation of thermospheric Hough mode extensions (cf. Lindzen et al[1]) of solar semidiurnal modes propagating upward from below 100 km. For interpretation of the model results in terms of consistency with various rocket, radar, and satellite data, the reader is referred to Forbes.[2,3]

(Received for publication 23 June 1982)

1. Lindzen, R.S., Hong, S., and Forbes, J.M. (1977) Semidiurnal Hough Mode Extensions into the Thermosphere and Their Applications, Memo Rept. 3442, Nav. Res. Lab., Washington, D.C.

2. Forbes, J.M. (1982) Atmospheric Tides, 1, Model description and results for the solar diurnal component, J. Geophys. Res. 87:5222-5240.

3. Forbes, J.M. (1982) Atmospheric Tides, 2, The solar and lunar semidiurnal components, J. Geophys. Res. 87:5241-5252.

Previous notable theoretical studies of the thermally-forced solar diurnal tide in the earth's atmosphere include those by Lindzen[4,5] and Lindzen and Blake[6] for the tides excited by O_3 and H_2O insolation absorption below 80 km, and by Forbes and Garrett,[7,8] Harris and Mayr,[9] and Mayr and Harris[10] for the thermospheric tide excited in-situ by UV and EUV solar radiation. The early work of Lindzen[4] considered tidal oscillations in an inviscid, isothermal, and motionless background atmosphere, and utilized the H_2O heating rates given by Siebert[11] and the diurnal drive due to O_3 absorption as computed by Leovy.[12] Lindzen's computational results reproduced salient features of observational data which reflected the relative importance of propagating and trapped (evanescent) tidal modes at different latitudes and heights. Using an equivalent gravity wave formalism, Lindzen[5,13] and Lindzen and Blake[6] later considered the effects of height-dependent temperature structure and molecular dissipation on the diurnal propagating tide excited below 80 km, and made some estimates of the diurnal tide excited by UV and EUV absorption in the thermosphere. Simulations of thermospheric tidal dynamics that take into account the latitude-height inseparability of the thermospheric tidal system are provided by Forbes and Garrett,[7,8] Harris and Mayr,[9] and Mayr and Harris.[10] These latter models, however, do not consider the effects of mean winds or latitude variations in background thermal or compositional structure.

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4. Lindzen, R.S. (1967) Thermally driven diurnal tide in the atmosphere, Quart. J. Roy. Meteorol. Soc. 93:18-42.
5. Lindzen, R.S. (1970) Internal gravity waves in atmospheres with realistic dissipation and temperature. Part I. Mathematical development and propagation of waves into the thermosphere, Geophys. Fluid Dyn. 1:303-355.
6. Lindzen, R.S., and Blake, D. (1970) Mean heating of the thermosphere by tides, J. Geophys. Res. 75:6868-6871.
7. Forbes, J.M., and Garrett, H.B. (1976) Solar diurnal tide in the thermosphere, J. Atmos. Sci. 33:2226-2241.
8. Forbes, J.M., and Garrett, H.B. (1978) Seasonal-latitudinal structure of the diurnal thermospheric tide, J. Atmos. Sci. 35:148-159.
9. Harris, I., and Mayr, H.G. (1975) Thermospheric dynamics, 1, Theoretical formulation, J. Geophys. Res. 80:3925-3933.
10. Mayr, H.G., and Harris, I. (1977) Diurnal variations in the thermosphere, 2, Temperature, composition, winds, J. Geophys. Res. 82:2628-2640.
11. Siebert, M. (1961) Atmospheric tides, in Advances in Geophysics, I, H.E. Landsberg and J. Ban Meigham, Eds., Academic Press, New York, pp. 105-187.
12. Leovy, C. (1964) Radiative equilibrium of the mesosphere, J. Atmos. Sci. 21:238-248.
13. Lindzen, R.S. (1971) Internal gravity waves in atmospheres with realistic dissipation and temperature. Part III. Daily variations in the thermosphere, Geophys. Fl. Dyn. 2:89-121.

The present study of the solar diurnal tide is a comprehensive investigation intended to correct shortcomings of the above-cited theoretical works, and thereby to contribute to a better understanding of the physics of atmospheric tidal oscillations as well as provide a standard for comparison with future observational studies. Specifically:

(1) We use recently computed H_2O and O_3 heating rates (Forbes and Garrett,[14]) that differ considerably from those adopted in previous theoretical calculations.

(2) Computations of the diurnal propagating tide take into account eddy dissipation in the mesosphere and lower thermosphere.

(3) Parameterization of the background atmosphere from the surface to 400 km takes into account height, latitudinal, seasonal, and solar cycle variations in thermal structure, composition, and mean winds.

(4) Calibration of the thermospheric heat input (EUV solar flux) as a function of solar activity uses more accurate (2-pulse) determinations of diurnal temperature oscillations in the F-region over Millstone Hill. Tuning of the Forbes and Garrett[7,8] models was based on the less accurate 1-pulse data reported by Salah et al[15] over a more restricted solar cycle range.

(5) The molecular thermal conductivities and viscosities recommended by Forbes and Garrett[16] are adopted. These new models affect the EUV solar input inferred from the calibration procedure mentioned in Ref. 4.

(6) Previous studies of the diurnal tide have concentrated separately on tides excited above and below 100 km. Tidal structures in the transition region (100-150 km) where tidal oscillations due to both sources of excitation are comparable in magnitude are examined in the present model.

The solar and lunar semidiurnal atmospheric tides also have long and interesting histories, beginning with many years of barometric observations, and continuing in modern times with development of classical atmospheric tidal theory (see review by Chapman and Lindzen[17]). In recent years "mode coupling" due to interactions with background mean zonal winds and meridional temperature

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14. Forbes, J.M., and Garrett, H.B. (1978) Thermal excitation of atmospheric tides due to insolation absorption by O_3 and H_2O, Geophys. Res. Lett. 5:1013-1016.

15. Salah, J.E., Evans, J.B., Alcayde, D., and Bauer, P. (1976) Comparison of exospheric temperatures at Millstone Hill and St. Santin, Ann. Geophys. 32:257-266.

16. Forbes, J.M., and Garrett, H.B. (1979) Theoretical studies of atmospheric tides, Rev. Geophys. Space Phys. 17:1951-1981.

17. Chapman, S. and Lindzen, R.S. (1970) Atmospheric Tides, D. Reidel, Dordrecht, Netherlands.

gradients (Lindzen and Hong,[18] Walterscheid et al[19, 20, 21]) and the penetration into the thermosphere of propagating semidiurnal tides originating in the lower atmosphere, (Hong and Lindzen[22]) as well as their in-situ thermospheric excitation (Hong and Lindzen,[22] Garrett and Forbes[23]), have occupied the main interests of theoreticians in the field (see review by Forbes and Garrett[16]). These recent investigations have required the development of rather sophisticated numerical models. However, these models lack the continuity needed for a proper investigation of the coupling between the mesosphere, lower thermosphere, and upper thermosphere due to the joint effects of mean winds, eddy and molecular dissipation, and hydromagnetic coupling, which govern the properties of tides in these regions. One incentive for development of the present comprehensive model is to facilitate the modeling of mean heat and momentum deposition in the lower thermosphere by dissipating tidal waves, and the investigation of dynamical coupling between the mesosphere and thermosphere, in particular the interpretation of coordinated meteor wind and incoherent scatter observations during forthcoming Cooperative Tidal Observation Program (CTOP) intervals and the 1982-1985 Middle Atmosphere Program (MAP) period.

The following sections also detail the various mechanisms for exciting semidiurnal oscillations in the thermosphere, investigate the penetration of various modes of lower atmosphere origin into the thermosphere, and examine the relative importance of in-situ sources of excitation on the thermospheric semidiurnal tide.

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18. Lindzen, R.S., and Hong, S. (1974) Effects of mean winds and horizontal temperature gradients on solar and lunar semidiurnal tides in the atmosphere, J. Atmos. Sci. 31:1421-1466.

19. Walterscheid, R.L., and Venkateswaran, S.V. (1979) Influence of mean zonal motion and meridional temperature gradients on solar semidiurnal atmospheric tide: a spectral study. Part I: Theory, J. Atmos. Sci. 36:1623-1635.

20. Walterscheid, R.L., and Venkateswaran, S.V. (1979) Influence of mean zonal motion and meridional temperature gradients on solar semidiurnal atmospheric tide: a spectral study. Part II: Numerical results, J. Atmos. Sci. 36:1636-1662.

21. Walterscheid, R.L., DeVore, J.G., and Venkateswaran, S.V. (1980) Influence of mean zonal motion and meridional temperature gradients on the solar semidiurnal atmospheric tide: a revised spectral study with improved heating rates, J. Atmos. Sci. 37:455-470.

22. Hong, S., and Lindzen, R.S. (1976) Solar semidiurnal tide in the thermosphere, J. Atmos. Sci. 33:135-153.

23. Garrett, H.B., and Forbes, J.M. (1978) Tidal Structure of the thermosphere at equinox, J. Atmos. Terr. Phys. 40:657-688.

2. EQUATIONS AND METHOD OF SOLUTION

2.1 Equations

Realistic modeling of atmospheric tides requires consideration of a number of physical processes beyond those considered in classical tidal theory. These processes include molecular and eddy diffusion of heat and momentum, Newtonian cooling, hydromagnetic coupling, composition variations, and interactions with unperturbed winds and meridional temperature gradients. Many of the basic assumptions of classical tidal theory are retained: the earth is assumed to be a smooth sphere, and the atmosphere to be a compressible, hydrostatic, shallow, perfect gas in which variations in the acceleration due to gravity and other terms of order (z/a) are neglected. In addition, tidal fields are treated as small perturbations on a basic state, so that the equations may be linearized. This assumption of linearity is usually shown to be valid by a posteriori examination of the tidal solutions. Accordingly, the system of linearized equations that governs the majority of tidal applications in the earth's atmosphere (cf. Forbes and Garrett[16]) consists of the horizontal and vertical momentum equations

$$\frac{\partial u'}{\partial t} + \frac{U}{a \sin\theta}\frac{\partial u'}{\partial \lambda} + \frac{1}{a}\frac{\partial U}{\partial \theta} v' + \frac{\partial U}{\partial z} w' + \left[(2\omega - L_\lambda)\cos\theta + \frac{\cot\theta}{a} U\right] v'$$

$$= -\frac{1}{a \sin\theta}\frac{\partial}{\partial \lambda}\left(\frac{\delta p'}{\rho_o} + \Omega'\right) - D_\lambda u' - M_\lambda' + \frac{1}{\rho_o} F_\lambda' \qquad (1)$$

$$\frac{\partial v'}{\partial t} + \frac{U}{a \sin\theta}\frac{\partial v'}{\partial \lambda} - \left[(2\omega - L_\theta)\cos\theta + \frac{2\cot\theta}{a} U\right] u'$$

$$= -\frac{1}{a\rho_o}\frac{\partial \delta p'}{\partial \theta} + \frac{1}{a\rho_o^2}\frac{\partial p_o}{\partial \theta}\partial\rho' - \frac{1}{a}\frac{\partial \Omega'}{\partial \theta}$$

$$- D_\theta v' - M_\theta' + \frac{1}{\rho_o} F_\theta' \qquad (2)$$

$$\frac{\partial \delta p'}{\partial z} = -\delta\rho' g - \rho_o \frac{\partial \Omega'}{\partial z} \qquad (3)$$

the continuity equation

$$\frac{\partial \delta\rho'}{\partial t} + \frac{U}{a \sin\theta} \frac{\partial \delta\rho'}{\partial \lambda} + \frac{1}{a} \frac{\partial \rho_o}{\partial \theta} v' + \frac{\partial \rho_o}{\partial z} w'$$

$$+ \rho_o \left(\frac{1}{a \sin\theta} \frac{\partial u'}{\partial \lambda} + \frac{1}{a} \frac{\partial v'}{\partial \theta} + \frac{\cot\theta}{a} v' + \frac{\partial w}{\partial z} \right) = 0 \tag{4}$$

the ideal gas law

$$\frac{\delta p'}{p_o} = \frac{\delta \rho'}{\rho_o} + \frac{\delta T'}{T_o} \tag{5}$$

and the thermal energy equation

$$\frac{\partial \delta T'}{\partial t} + \frac{U}{a \sin\theta} \frac{\partial \delta T'}{\partial \lambda} + \frac{1}{a} \frac{\partial T_o}{\partial \theta} v' + \frac{\partial T_o}{\partial z} w'$$

$$= \frac{\gamma - 1}{R} J' + \frac{\gamma - 1}{R\rho_o} \kappa' - \alpha \delta T' + (\gamma - 1) \frac{T_o}{\rho_o}$$

$$\cdot \left(\frac{\partial \delta\rho'}{\partial t} + \frac{U}{a \sin\theta} \frac{\partial \delta\rho'}{\partial \lambda} + \frac{1}{a} \frac{\partial \rho_o}{\partial \theta} v' + \frac{\partial \rho_o}{\partial z} w' \right) \tag{6}$$

where

$$\begin{bmatrix} D_\lambda \\ D_\theta \end{bmatrix} = \varepsilon_1^o \begin{bmatrix} 1 & 0 \\ 0 & \sin^2 I \end{bmatrix} \tag{7}$$

represents the ion drag force,

$$\begin{bmatrix} F'_\lambda \\ F'_\theta \end{bmatrix} = \frac{\partial}{\partial z} (\mu_o + \rho_o \nu_{eddy}) \frac{\partial}{\partial z} \begin{bmatrix} u' \\ v' \end{bmatrix} \tag{8}$$

represents the divergence of the momentum flux due to molecular and eddy diffusion,

$$\kappa' = \frac{\partial}{\partial z} (K_o + \rho_o K_{eddy}) \frac{\partial}{\partial z} \delta T' \tag{9}$$

is the divergence of heat flux due to molecular and eddy diffusion, and

$M'_{\lambda,\theta}$ = momentum source terms;

u' = westerly velocity;

v' = northerly velocity;

w' = vertical velocity;

δT = perturbation temperature;

$\delta p'$ = perturbation pressure;

$\delta \rho'$ = perturbation density;

T_o = unperturbed temperature;

p_o = unperturbed pressure;

ρ_o = unperturbed density;

t = local time;

λ = longitude;

θ = colatitude;

z = altitude;

I = magnetic dip angle;

U = mean zonal wind;

a = mean radius of earth;

ω = earth's rotation rate;

Ω' = gravitational potential due to the moon;

α = Newtonian cooling coefficient;

μ_o = dynamic molecular viscosity;

ν_{eddy} = kinematic eddy viscosity;

K_o = molecular thermal conductivity;

K_{eddy} = eddy thermal conductivity;

ε_1^o = diurnally averaged ion drag coefficient;

L_λ = diurnally averaged Hall coefficient, equal to L_θ

g = acceleration due to gravity;

R = gas constant, equal to R^*/M;

R^* = universal gas constant;

M = mean molecular weight;

c_v = heat capacity at constant volume;

c_p = heat capacity at constant pressure;

γ = c_p/c_v;

J = heating rate per unit mass per unit time.

This system of linearized equations includes the mean zonal wind U; however, it neglects the mean meridional winds. The importance of mean zonal winds is estimated to be of the order of $U/\omega a \sin\theta$, or $\lesssim 20$ percent at nonpolar latitudes for U less than 50 m/sec. Mean meridional motions are weak in comparison to mean zonal winds below 175 km in the earth's atmosphere (Leovy,[12] Dickinson et al[24]) and are therefore neglected in the above equations. Although mean meridional winds of order 100-200 m/sec could occur in the summer at high latitudes ($\lesssim 60^{\circ}$) above 200 km (Dickinson et al[25]), mean winds in the upper thermosphere are expected to have little effect on tidal solutions, since the tidal fields asymptotically reach their diffusion-dominated values by about 200 km (Hong and Lindzen,[22] Forbes and Garrett[7]). To the order of these approximations, Eqs. (1)-(6) contain the essential physics of most tidal phenomena in the earth's atmosphere for which a linear description is appropriate.

To simplify the numerical solution of these equations, we assume migrating tidal solutions of the form $f' = \hat{f} e^{in(\omega t+\lambda)}$. Substituting this for each variable and eliminating $\hat{p}$ and $\hat{\rho}$ from Eqs. (1)-(6), gives four coupled partial differential equations in $\hat{u}$, $\hat{v}$, $\hat{w}$, and $\delta\hat{T}$:

$$\left[\frac{1}{\rho_o}\hat{F}_\lambda - i\sigma n + \frac{gHin}{\sigma a^2 \sin^2\theta} - D_\lambda\right]\hat{u} + \left[-(2\omega - L_\lambda)\cos\theta\right.$$

$$\left. + \frac{gH}{\sigma a^2 \sin\theta}\left(\frac{\partial}{\partial\theta} + \cot\theta + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta}\right) - \frac{1}{a}\frac{\partial}{\partial\theta} - \frac{\cot\theta}{a}U\right]\hat{v}$$

$$+ \left[\frac{gH}{\sigma a \sin\theta}\left(\frac{\partial}{\partial z} + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z}\right) - \frac{\partial U}{\partial z}\right]\hat{w} - \frac{inR}{a\sin\theta}\delta\hat{T} - \frac{+in}{a\sin\theta}\hat{\Omega} + \hat{M}_\lambda \qquad (10)$$

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24. Dickinson, R.E., Ridley, E.C., and Roble, R.G. (1975) Meridional circulation in the thermosphere, J. Atmos. Sci. 32:1737-1753.

25. Dickinson, R.E., Ridley, E.C., and Roble, R.G. (1977) Meridional circulation in the thermosphere. II. Solstice conditions, J. Atmos. Sci. 34:178-192.

$$\left[(2\omega - L_\theta)\cos\theta + \frac{gH}{\sigma a^2 \sin\theta}\left(\frac{\partial}{\partial\theta} - \sigma_\theta - \cot\theta\right) + \frac{2\cot\theta}{a}U\right]\hat{u}$$

$$+\left\{\frac{1}{\rho_o}\hat{F}_\theta - i\sigma n - \frac{igH}{\sigma n a^2}\left[\frac{\partial^2}{\partial\theta^2} + \cot\theta\left(\frac{\partial}{\partial\theta} - \sigma_\theta\right) - \csc^2\theta\right.\right.$$

$$\left.\left.+\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta} - \sigma_\theta\right)\frac{\partial}{\partial\theta} + \frac{1}{\rho_o}\frac{\partial^2\rho_o}{\partial\theta^2} - \left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta} + \sigma_\theta\right)\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta}\right)\right] - D_\theta\right\}\hat{v}$$

$$-\frac{igH}{\sigma n a}\left[\frac{\partial^2}{\partial z\,\partial\theta} - \sigma_\theta\frac{\partial}{\partial z} + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z}\frac{\partial}{\partial\theta} + \frac{1}{\rho_o}\frac{\partial^2\rho_o}{\partial z\,\partial\theta} - \left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta} + \sigma_\theta\right)\right.$$

$$\left.\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z}\right)\right]\hat{w} - \frac{R}{a}\left(\frac{\partial}{\partial\theta} + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta}\right)\delta\hat{T} = +\frac{1}{a}\frac{\partial\hat{\Omega}}{\partial\theta} + \hat{M}_\theta \qquad (11)$$

$$\left[-\frac{gH^2}{\sigma a\sin\theta}\left(\frac{\partial}{\partial z} - \sigma_z\right)\right]\hat{u} + \frac{igH^2}{\sigma n a}\left[\left(\frac{\partial}{\partial z} - \sigma_z\right)\left(\frac{\partial}{\partial\theta} + \cot\theta\right) + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta}\frac{\partial}{\partial z}\right.$$

$$\left.+\frac{1}{\rho_o}\frac{\partial^2\rho_o}{\partial\theta\,\partial z} - \left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z} + \sigma_z\right)\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial\theta}\right)\right]\hat{v} + \frac{igH^2}{\sigma n}\left[\frac{\partial^2}{\partial z^2}\right.$$

$$\left.+\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z} - \sigma_z\right)\frac{\partial}{\partial z} + \frac{1}{\rho_o}\frac{\partial^2\rho_o}{\partial z^2} - \left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z}\right)\left(\frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z} + \sigma_z\right)\right]\hat{w}$$

$$+ H\left[R\left(\frac{\partial}{\partial z} + \frac{1}{\rho_o}\frac{\partial\rho_o}{\partial z}\right) + \frac{\partial R}{\partial z}\right]\delta\hat{T} = 0 \qquad (12)$$

$$- \frac{(\gamma - 1) T_o \, in}{a \sin\theta} \hat{u} - \left[\frac{(\gamma - 1) T_o}{a} \left(\frac{\partial}{\partial \theta} + \cot\theta \right) + \frac{1}{a} \frac{\partial T_o}{\partial \theta} \right] \hat{v}$$

$$- \left[(\gamma - 1) T_o \frac{\partial}{\partial z} + \frac{\partial T_o}{\partial z} \right] \hat{w} + \left[\frac{(\gamma - 1)}{R} \hat{\kappa} - i\sigma n - \alpha \right] \delta\hat{T} = - \frac{(\gamma - 1)}{R} \hat{J} \qquad (13)$$

where $\sigma = \omega + [U/(a \sin\theta)]$, $\sigma_\theta = \frac{1}{\sigma} \frac{\partial \sigma}{\partial \theta}$, $\sigma_z = \frac{1}{\sigma} \frac{\partial \sigma}{\partial z}$, H is the scale height, and n is the zonal wavenumber.

2.2 Boundary Conditions

The system [Eqs. (10)-(13)] requires one set of boundary conditions to close the equations in θ and another set to close the equations in z. In the upper thermosphere, molecular diffusion dominates, and the requirements that there be no flux of horizontal momentum or heat from infinity leads to

$$\frac{d}{dz} \begin{Bmatrix} \hat{u} \\ \hat{v} \\ \delta\hat{T} \end{Bmatrix} = 0 \qquad (14)$$

above z_t = 350-450 km, depending on the level of solar activity (Lindzen[5]). Similarly, assuming $\partial R/\partial z$ and $\partial H/\partial z$ go to zero as $z \to z_t$, it is simple to show that

$$\frac{d\hat{w}}{dz} - \frac{i\sigma n R}{g} \delta\hat{T} = 0 \quad \text{for} \quad z > z_t \; . \qquad (15)$$

The conditions of Eqs. (14) and (15) applied at $z_{top} \approx 450$ km comprise the upper boundary conditions for the model.

At the lower boundary (z_{bot} = 0.0 km) the conditions utilized by Lindzen[5] and Lindzen and Forbes[26] are adopted:

$$w = 0 \quad \text{and} \quad \frac{d}{dz} \begin{Bmatrix} \hat{u} \\ \hat{v} \\ \delta\hat{T} \end{Bmatrix} - C_s \begin{Bmatrix} \hat{u} \\ \hat{v} \\ \delta\hat{T} \end{Bmatrix} = 0 \qquad (16)$$

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26. Lindzen, R.S., and Forbes, J.M. (1978) Boundary layers associated with thermally forced planetary waves, J. Atmos. Sci. 35:1441-1449.

where the choice of $C_s = 2 \times 10^{-3}$ m^{-1} is designed to simulate Kuo's results[27] for the transmission of surface temperature oscillations to the atmospheric boundary layer. In practice the computed u', v', and $\delta T'$ fields are only weakly dependent o the value of C_s.

Boundary conditions at the equator make use of symmetry relations there. For symmetric modes and thermospheric tides excited in-situ at equinox

$$\frac{\partial}{\partial \theta} \begin{Bmatrix} \hat{u} \\ \hat{w} \\ \delta\hat{T} \end{Bmatrix} = 0 \quad \text{and} \quad v = 0 \text{ at } \theta = \frac{\pi}{2} \quad . \tag{17}$$

For antisymmetric modes

$$\frac{\partial v}{\partial \theta} = 0 \quad \text{and} \begin{Bmatrix} \hat{u} \\ \hat{w} \\ \delta\hat{T} \end{Bmatrix} = 0 \quad \text{at} \quad \theta = \frac{\pi}{2} \quad . \tag{18}$$

Since the pole is a singular point, $\hat{u}$, $\hat{v}$, $\hat{w}$, and $\delta\hat{T}$ are expanded in a Taylor series to close the equations there (see following subsection).

2.3 Numerical Solution

Tidal amplitudes are generally characterized by exponential growth with height, suggesting that exponential solutions be assumed to prevent numerical overflow. Further, different vertical integration steps are expected for numerical convergence within the planetary boundary layer ($z \lesssim 2$ km; cf. Lindzen and Forbes[26]), the "inviscid" lower atmosphere (2 km $\lesssim z \lesssim$ 90 km), and the "viscid" thermosphere ($z \gtrsim$ 90 km. Transforming to a new vertical coordinate X allows more economical numerical integration. We define X:

$$X = \frac{z}{2}(C_1 + C_3) + \sum_{i=1}^{2} \delta_i \left(\frac{C_{i+1} - C_i}{2} \right) \ln \left[\frac{\cosh ((z - z_i)/\delta_i)}{\cosh (z_i/\delta_i)} \right] \tag{19}$$

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27. Kuo, H. L. (1973) Planetary boundary layer flow of a stable atmosphere over the globe, J. Atmos. Sci. 30:53-65.

such that

$$F_1 = \frac{dX}{dz} = C_1 + \sum_{i=1}^{2} \left(\frac{C_{i+1} - C_i}{2} \right) \left[1 + \tanh \left(\frac{z - z_i}{\delta_i} \right) \right] \tag{20}$$

$$F_2 = \frac{d^2X}{dz^2} = \sum_{i=1}^{2} \left(\frac{C_{i+1} - C_i}{2\delta_i} \right) \operatorname{sech}^2 \left(\frac{z - z_i}{\delta_i} \right) \tag{21}$$

Transformation of Eqs. (10)-(13) to the X coordinate system is performed by substituting:

$$\hat{f} = e^{X/2} \tilde{f} \tag{22}$$

$$\frac{d\hat{f}}{dz} = F_1 \frac{d\hat{f}}{dX} = F_1 e^{x/2} \left(\frac{d\tilde{f}}{dX} + \frac{\tilde{f}}{2} \right) \tag{23}$$

$$\frac{d^2\hat{f}}{dz^2} = F_1^2 \frac{d^2\hat{f}}{dX^2} + F_2 \frac{d\hat{f}}{dX} = e^{x/2} \left[F_1^2 \frac{d^2\tilde{f}}{dX^2} + (F_1^2 + F_2) \frac{d\tilde{f}}{dX} + \frac{1}{2} \left(F_2 + \frac{F_1^2}{2} \right) \tilde{f} \right] \tag{24}$$

where $\hat{f}$ denotes either $\hat{u}$, $\hat{v}$, $\hat{w}$, or $\delta\hat{T}$. Division of the resulting partial differential equations by $e^{x/2}$ yields a partial differential system for $\tilde{u}$, $\tilde{v}$, and $\tilde{w}$, and $\delta\tilde{T}$ in $X - \theta$ coordinates. For a constant δX integration step this formulation results in altitude regimes of constant δz ($\approx \delta X / C_i$) with transitions between different δz's occurring at altitudes z_i over distances δ_i. For the following choices of coefficients:

i	C_i (km^{-1})	Z_i (km)	δ_i (km)
1	4.00	1.5	0.50
2	0.150	120.	40.
3	0.025	---	---

X_{top} 32.0 corresponds to z_{top} = 448.752 km, and δx = 0.2 corresponds to $\delta z \approx 0.05$ km below 2.0 km (the planetary boundary layer), $\delta z \approx 1.33$ km below 160 km and above the planetary boundary layer, and $\delta z \approx 8$ km above 160 km. Values of

C_2 and C_3 are chosen to be close to 1/H so that the $e^{x/2}$ dependence is physically meaningful. In previous studies z was stretched into the new X coordinate by the transformation

$$X = \int_0^z \frac{dZ'}{H} \quad \text{and} \quad \frac{dX}{dz} = \frac{1}{H}$$

(cf. Forbes and Garrett,[7] Hong and Lindzen[22]). The new transformation used in this report eliminates the solar cycle and latitudinal dependences, which cause unnecessary inconveniences in practice.

After the transformation to the X-coordinate, Eqs. (10)-(13) can be written in matrix form as

$$\hat{a}\,\frac{\partial^2\phi}{\partial\theta^2} + \hat{b}\,\frac{\partial^2\phi}{\partial\theta\,\partial z} + \hat{c}\,\frac{\partial^2\phi}{\partial z^2} + \hat{d}\,\frac{\partial\phi}{\partial\theta} + \hat{e}\,\frac{\partial\phi}{\partial z} + \hat{f}\,\phi = R \tag{25}$$

where $\hat{a}$, $\hat{b}$, $\hat{c}$, $\hat{d}$, $\hat{e}$, and $\hat{f}$ are 4×4 matrices and R is a 4-vector. The solution vector is given by $\phi = [\tilde{u},\ \tilde{v},\ \tilde{w},\ \delta\tilde{T}]^T$. Dividing the θ domain into a number of discrete intervals and approximating Eq. (25) results in the finite-difference equation:

$$\left(\frac{\hat{a}}{\delta\theta^2} - \frac{\hat{d}}{2\delta\theta}\right)_k \phi_{k-1} + \left(\frac{-2\hat{a}}{\delta\theta^2} + \hat{f}\right)_k \phi_k + \left(\frac{\hat{a}}{\delta\theta^2} + \frac{\hat{d}}{2\delta\theta}\right)_k \phi_{k+1}$$

$$- \frac{\hat{b}_k}{2\delta\theta}\,\frac{\partial}{\partial z}\,\phi_{k-1} + \hat{e}_k\,\frac{\partial}{\partial z}\,\phi_k + \frac{\hat{b}_k}{2\delta\theta}\,\frac{\partial}{\partial z}\,\phi_{k+1} + \hat{c}_k\,\frac{\partial^2}{\partial z^2}\,\phi_k = R_k \tag{26}$$

where the subscripts k = 1, 2, ... K refer to the k^{th} grid point in the θ direction. The system of Eqs. (26) can be written as a system of 4K coupled ordinary differential equations:

$$\hat{A}\,\frac{d^2}{dz^2}\,\Phi + \hat{B}\,\frac{d}{dz}\,\Phi + \hat{C}\,\Phi = D \tag{27}$$

where $\hat{A}$, $\hat{B}$, $\hat{C}$ are $4K \times 4K$ matrices and D is a 4K-vector. The solution vector Φ is now the set of values $\Phi = [\tilde{u}_1,\ \tilde{v}_1,\ \tilde{w}_1,\ \delta\tilde{T}_1,\ \ldots\ \tilde{u}_K,\ \tilde{v}_K,\ \tilde{w}_K,\ \delta\tilde{T}_K]^T$ at a particular X for all the grid points in θ. The equations are closed at the pole by extending a Taylor series there. For example, if

$$\phi = \left[\hat{u},\ \hat{v},\ \hat{w},\ \delta\hat{T}\right]^T ,$$

then

$$\phi_{pole} = \phi_{k+1} = \phi_k + \frac{\phi_k - \phi_{k-1}}{\delta\theta}\,(\delta\theta)$$

$$= 2\phi_k - \phi_{k-1} ,$$

where k + 1 denotes the finite-difference grid point at the pole, k is the grid point next to the pole, and so forth. The solution of Eq. (27) is easily obtained by the Gaussian elimination algorithm outlined by Lindzen and Kuo.[28]

In a situation where tidal modes are excited both directly by either solar thermal or lunar gravitational forcing, and also indirectly by "mode coupling" (cf. Lindzen and Hong[18]) due to interactions with mean winds and meridional temperature gradients, the choice of numerical grid spacings must be determined by the highest order mode which contributes significantly to the resultant total tidal field. As will be discussed in Part II, the highest order solar semidiurnal modes of practical importance are (2, 4) and (2, 5). The (2, 6) mode does not enter as significantly as in other studies of the semidiurnal tide (Lindzen and Hong[18]) due to (a) better latitudinal resolution in the present model, and (b) the damping effects of eddy diffusion in the mesosphere and lower thermosphere. For individual modes, finite difference steps in the vertical (δx) and in latitude ($\delta\theta$) required to obtain a convergent solution are determined by comparing simulations for an "almost inviscid" motionless atmosphere with computations based on classical inviscid tidal theory (cf. Chapman and Lindzen[17]). For the (2, 2) and (2, 4) symmetric semidiurnal modes, accuracies of 10 percent are obtained for $\delta\theta = 6^o$ and $\delta x = 0.2$. Similar accuracies apply to the (2, 3) and (2, 5) antisymmetric solar modes, to the first four solar terdiurnal modes, and the first four lunar semidiurnal gravitational modes, since these are characterized by vertical and horizontal scales very similar to their solar (2, 2) and (2, 4) counterparts. For the (2, 6) mode, 50 percent accuracy is obtained with $\delta\theta = 6^o$ and $\delta x = 0.2$. The solar diurnal (1, -2), (1, -4), and (1, -1) modes are easily resolved to better than 10 percent accuracy. The short-wavelength (1, 3) and (1, 2) modes are not efficiently excited and are subject to diffusive damping in the mesosphere (see later discussion); therefore, they are not considered. The only difficulty in economically

28. Lindzen, R.S., and Kuo, H.L. (1969) A reliable method for the numerical integration of a large class of ordinary and partial differential equations, Mo. Wea. Rev. 97:732-734.

resolving an observationally important tidal mode occurs with respect to the (1, 1) solar symmetric diurnal propagating tide. However, mode coupling is not important for the (1, 1) mode since it is primarily restricted to latitudes less than 30^{o} where mean winds and meridional temperature gradients are very weak. Therefore, an "equivalent gravity wave" approach (Lindzen,[5] Forbes and Hagan[29]) can be successfully utilized in simulating the (1, 1) mode in the presence of molecular and eddy diffusion. Such an approach is described later in this paper.

3. BACKGROUND ATMOSPHERE

3.1 Introduction

In this study tidal oscillations are treated as linear perturbations on a background atmosphere which is dependent on height and latitude. Examination of Eqs. (10)-(13) indicates that zeroth-order solutions for westerly velocity and temperature must be provided to solve for the first-order tidal perturbations. In addition, macroscopic parameterizations of molecular and turbulent diffusion of heat and momentum are required, as well as composition variations and ion drag. Basically, terms in Eqs. (10)-(13) which involve these parameterizations or models represent coupling of the tidal equations to other sets of equations which describe these respective physical processes. Errors involved in neglecting feedback from these processes are generally small compared to uncertainties connected with specification of excitation mechanisms and with the observational data that we are attempting to interpret. For further discussion of the assumptions and approximations made in writing Eqs. (10)-(13), the reader is referred to Forbes and Garrett.[16]

3.2 Winds, Temperature, and Composition

Models for the background (zonally-averaged) westerly velocity and temperature fields as shown in Figures 1 and 2 are based on those utilized by Lindzen and Hong[18] below 100 km and computed by Roble et al[30] above 100 km. These contours represent an adequate representation of the zonal mean thermal and dynamical structure of the stratosphere, mesosphere, and thermosphere for our purposes. To simulate tides for particular days or periods where simultaneous global measurements are taken it would be desirable to make corresponding adjustments to

29. Forbes, J.M., and Hagan, M.E. (1979) Tides in the joint presence of friction and rotation: an f-plane approximation, J. Geophys. Res. 84: 803-810.

30. Roble, R.G., Dickinson, R.E., and Ridley, E.C. (1977) Seasonal and solar cycle variations of the zonal mean circulation in the thermosphere, J. Geophys. Res. 82:5493-5504.

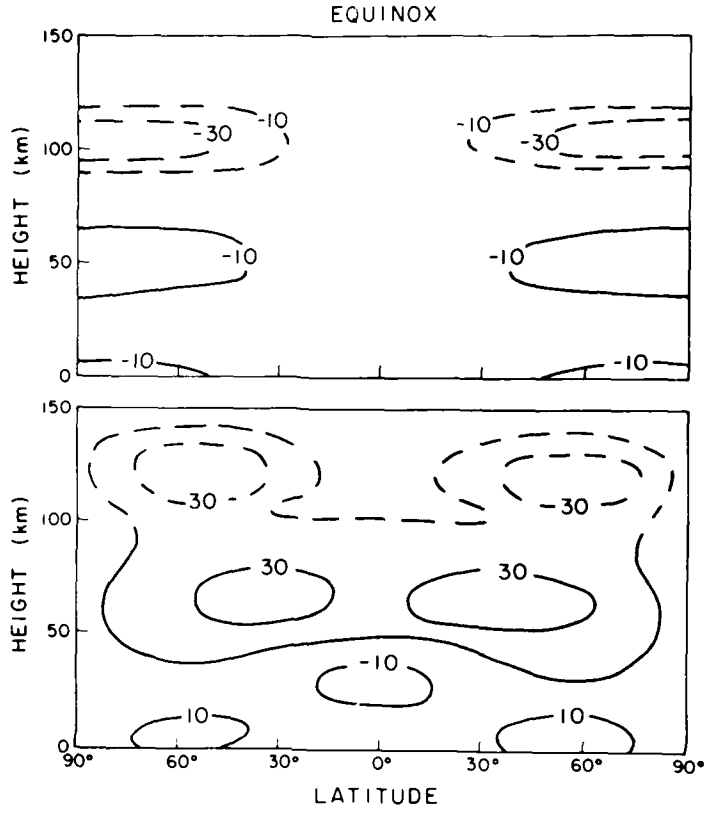

Figure 1. Contours of Zonally-averaged Westerly Velocity (bottom) in m/sec and Differences From Equatorial Temperature (top) in K at Equinox. Since equinox fields are negligibly small above 150 km, solar cycle variability of these fields is neglected for equinox conditions. Dashed lines are utilized to indicate uncertainties in the circulation between 90 and 170 km

the parameterizations of the background atmosphere in the unlikely event that these data are also available in sufficient quantity. Some modification of the winds and temperatures from Roble et al[30] between 90 and 120 km, which is the region of greatest uncertainty for their model due to boundary effects, was performed to allow for a smooth merging with profiles below 100 km. The mean zonal winds as computed by Roble et al[30] are due solely to the direct circulation forced by UV and EUV solar radiation absorption in the lower thermosphere, and do not take into account possibly comparable accelerations by tides and gravity waves being dissipated in this region. Contours between 90 and 150 km are represented by dashed curves in Figures 1 and 2 to reflect these uncertainties. Simple trigonometric and

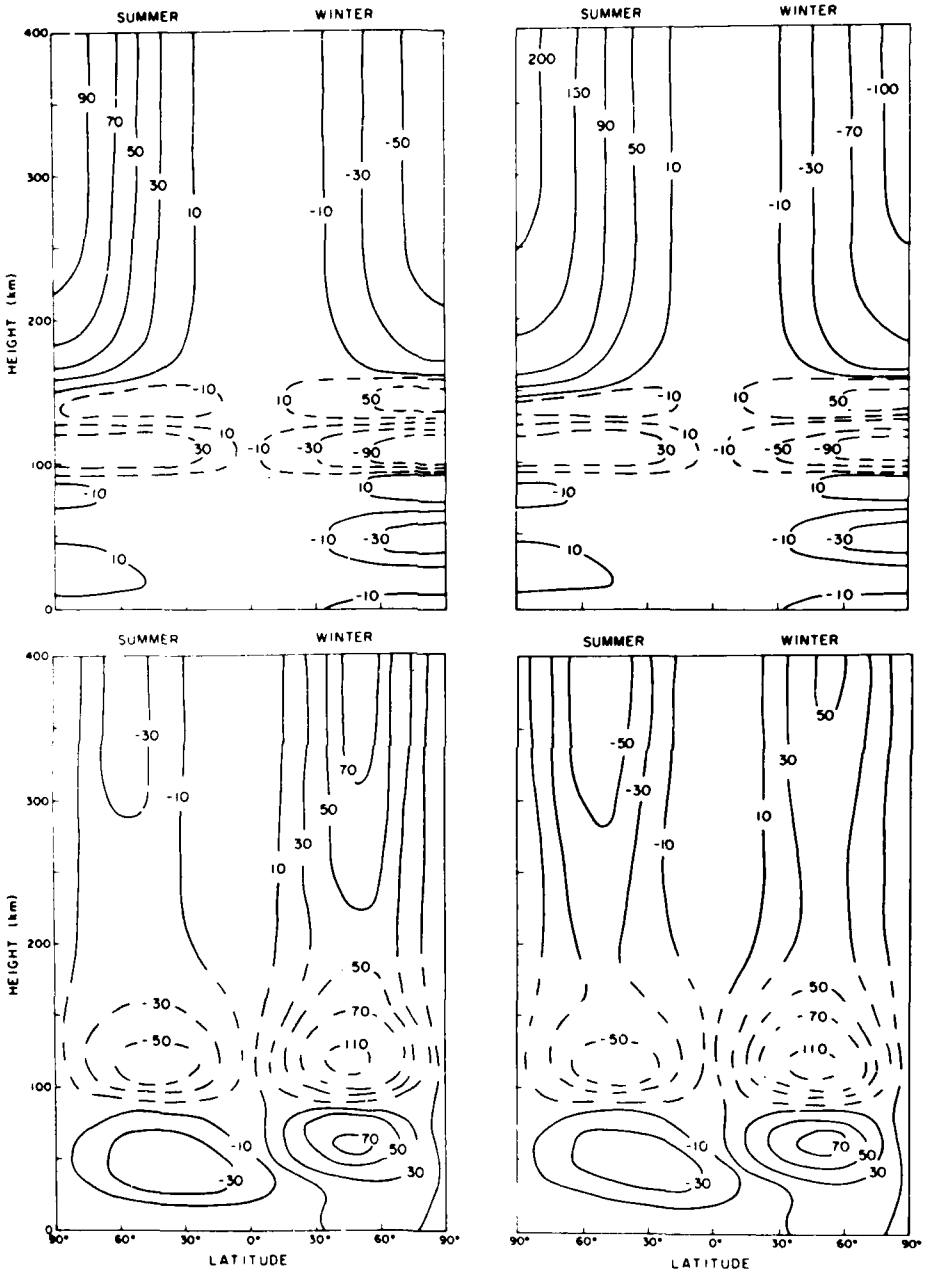

Figure 2. Contours of Zonally-averaged Westerly Velocity (bottom) in m/sec and Differences From Equatorial Temperature (top) in K at December Solstice. The left and right figures correspond to global mean exospheric temperatures ($\bar{T}_o$) of 800 K and 1200 K, respectively. Dashed lines indicate uncertainties in the circulation between 90 and 170 km

exponential functions were utilized to fit the Roble et al[30] model analytically as a function of height, latitude, season, and level of solar activity. We calculate the thermospheric distribution of mean molecular weight as a function of height, latitude, season, and solar cycle, using the MSIS model (Hedin et al[31, 32]) in the same way as Roble et al.[30]

3.3 Molecular Conductivity and Viscosity

A parametric representation of the molecular conductivity coefficient, K_o, is derived from empirical fits to experimental data as given by Banks and Kockarts[33]:

$$K_o = AT^{0.69} + BT + C$$

where

$$A = \sum_i \left[K_i \left(\frac{1}{n_i} \sum_j n_j \phi_{ij} \right)^{-1} \right]$$

$$\phi_{ij} = \frac{\left[1 + (K_i/K_j)^{1/2} (m_i/m_j)^{1/4} \right]^2}{2(2^{1/2}) \left[1 + (m_i/m_j) \right]^{1/2}}$$

$$B = \frac{1.9 n(N_2)}{\sum_i \phi(N_2)_i n_i} + \frac{2.55 n(O_2)}{\sum_i \phi(O_2)_i n_i}$$

$$C = \frac{51.4 n(N_2)}{\sum_i \phi(N_2)_i n_i} - \frac{92.7 n(O_2)}{\sum_i \phi(O_2)_i n_i}$$

---

31. Hedin, A.E., Salah, J.E., Evans, J.V., Reber, C.A., Newton, G.P., Spencer, N.W., Kayser, D.C., Alcayde, D., Bauer, P., Cogger, L., and McClure, J.P. (1977) A global thermospheric model based on mass spectrometer and incoherent scatter data, MSIS 1. N_2 density and temperature, J. Geophys. Res. 82:2139-2147.

32. Hedin, A.E., Reber, C.A., Newton, G.P., Spencer, N.W., Brinton, H.C., Mayr, H.G., and Potter, W.E. (1977) A global thermospheric model based on mass spectrometer and incoherent scatter data, MSIS 2. Composition, J. Geophys. Res. 82:2148-2156.

33. Banks, P.M., and Kockarts, G. (1973) Aeronomy, Part B, Academic Press, New York.

The values for $\phi(N_2)_i$ are as follows:

Species	Value
O	0.771
O_2	0.975
N_2	1.0
He	0.301
H	0.195

The values for $\phi(O_2)_i$ are as follows:

Species	Value
O	0.718
O_2	1.0
N_2	1.02
He	0.293
H	0.192

These experimental data include a contribution to the thermal conductivity resulting from excitation of the vibrational degrees of freedom in N_2 and O_2. Since collisional quenching rates are extremely low above 100 km, equilibrium between the vibrational levels and gas kinetic energy is not established through collisions, and the N_2 and O_2 vibrational temperature can exceed the gas kinetic temperature in the thermosphere (Roble and Dickinson[34]). Therefore, for thermospheric calculations the vibrational contribution to K_0 for O_2 and N_2 should be removed. Following Roble and Dickinson,[34] the experimental values for thermodynamic equilibrium are corrected by

$$K_o = K_{experimental} \left\{ 1 + \frac{2}{7} \frac{(\theta/T)^2 \exp(\theta/T)}{(\exp(\theta/T) - 1)^2} \right\}^{-1}$$

where it is assumed that O_2 and N_2 behave as quantum mechanical harmonic oscillators, and that $\theta(N_2) = 3340$ K and $\theta(O_2) = 2230$ K are the characteristic harmonic oscillator temperatures. Figure 3 shows that a good fit to the vibrationally

34. Roble, R.G., and Dickinson, R.E. (1973) Is there enough solar extreme ultraviolet radiation to maintain the global mean thermospheric temperture?, J. Geophys. Res. 78:249-257.

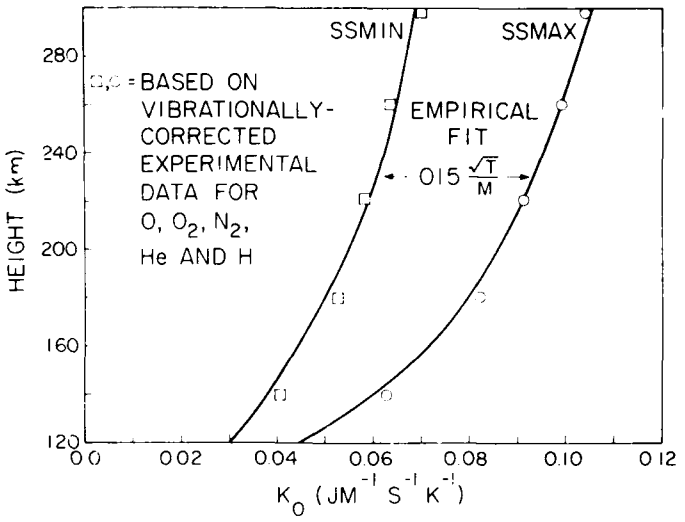

Figure 3. Empirical Fits to Thermal Conductivities Based on Corrected Laboratory Data and Species Composition as Given by the MSIS Model (see text)

corrected conductivity for an N_2, O_2, O, He, and H thermospheric gas mixture as specified by the MSIS model is given by $K_o = K_{oo} T^{2/3}/M$, where $K_{oo} = 0.015$ J/K m sec and M is the mean molecular weight in atomic mass units (Forbes and Garrett[16]). The molecular viscosity coefficient is related to the thermal conductivity by the Eucken formula derived from kinetic theory:

$$K_o/\mu_o = [1/4(9\gamma - 5)]\, c_v$$

which is a good approximation for monatomic, diatomic, or weak dipolar molecules.

For parameterizations of the form $K_o = K_{oo} T^{2/3}/M$ and $\mu_o = \mu_{oo} T^{2/3}$, linearizing the divergences of momentum and heat flux due to molecular diffusion in Eqs. (10)-(13) yields

$$\frac{\partial}{\partial z}\,\mu_o\,\frac{\partial}{\partial z} = \mu_o\left[\frac{\partial^2}{\partial z^2} + \frac{2}{3}\,\frac{1}{T_o}\,\frac{\partial T_o}{\partial z}\,\frac{\partial}{\partial z}\right]$$

$$\frac{\partial}{\partial z} K_o \frac{\partial}{\partial z} = K_o\left[\frac{\partial^2}{\partial z^2} + \frac{4}{3}\frac{1}{T_o}\frac{\partial T_o}{\partial z}\frac{\partial}{\partial z} - \frac{2}{9}\left(\frac{1}{T_o}\frac{\partial T_o}{\partial z}\right)^2\right.$$

$$\left. - \frac{1}{M}\frac{\partial M}{\partial z}\frac{\partial}{\partial z} + \frac{2}{3}\frac{1}{T_o}\frac{\partial^2 T_o}{\partial z^2} - \frac{2}{3}\frac{1}{M}\frac{\partial M}{\partial z}\frac{1}{T_o}\frac{\partial T_o}{\partial z}\right]$$

3.4 Ion Drag

As discussed by Forbes and Garrett,[16] the ion drag and Hall coefficients in Eqs. (10) and (11) are adequately approximated by

$$\varepsilon_1 \approx \frac{N_i}{N}\frac{\nu_{in}}{1 + (\nu_{in}/\omega_i)^2}$$

$$\varepsilon_2 \approx (\nu_{in}/\omega_i)\varepsilon_1$$

where

N_i ion density;

N neutral density;

ω_i ion gyrofrequency;

ν_{in} ion-neutral collision frequency.

and $\nu_{in} = 2.6 \times 10^{-9}\,(N/M^{1/2})$ in cgs units where M is the mean molecular weight in AMU. The Lorentz deflection (Hall) force is small compared to the coriolis force and may be neglected in practice (Forbes and Garrett[16]). The ion drag force acts as an important momentum sink as well as a mechanism for coupling tidal oscillations of various periods (24, 12, and 8 hours). Figures 4 and 5 illustrate amplitude and phase contours of the mean, diurnal, and semidiurnal ion drag coefficients. The F-region winter anomaly at midlatitudes, and in particular its variation in intensity with solar cycle, is easily discerned in the diurnal and semidiurnal components of the ion drag force. Similarly, phases of the diurnal and semidiurnal components at low latitudes reflect salient features of the latitudinal and temporal structure of the Equatorial (Appleton) F-region Anomaly.

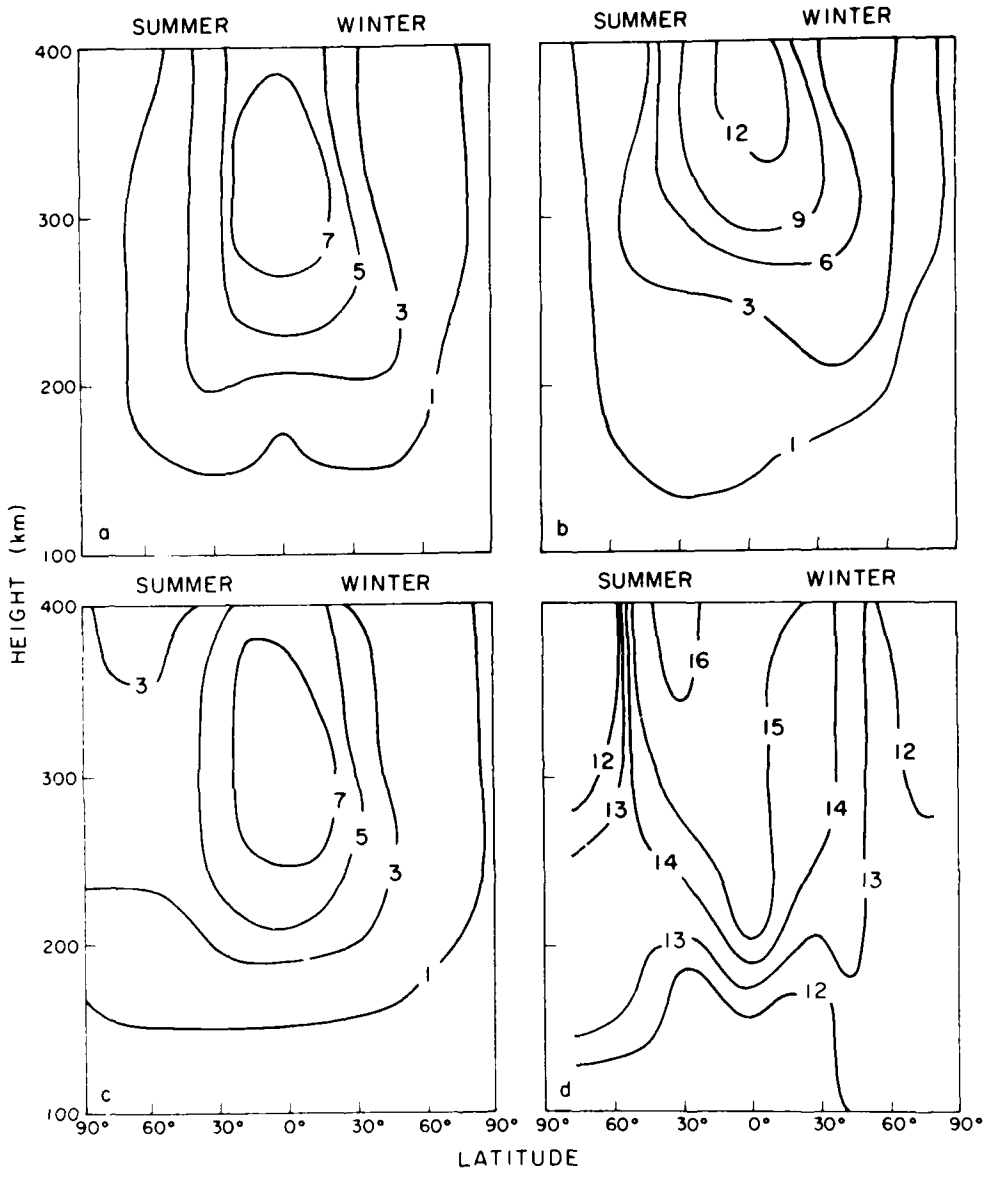

Figure 4. Contours (for December solstice) Representing Ion Drag in Terms of $(100\ \varepsilon_n/\omega)$ (ε_n/ω ranges from 10^{-2} to 12×10^{-2}) where ω = earth's rotation rate and ε_n is the harmonic component of the ion drag coefficient: (a) diurnal amplitude for $\overline{T}_o$ = 800 K; (b) diurnal amplitude for $\overline{T}_o$ = 1200 K; (c) zonal mean for $\overline{T}_o$ = 800 K; and (d) diurnal phase (LT) for $\overline{T}_o$ = 800 K

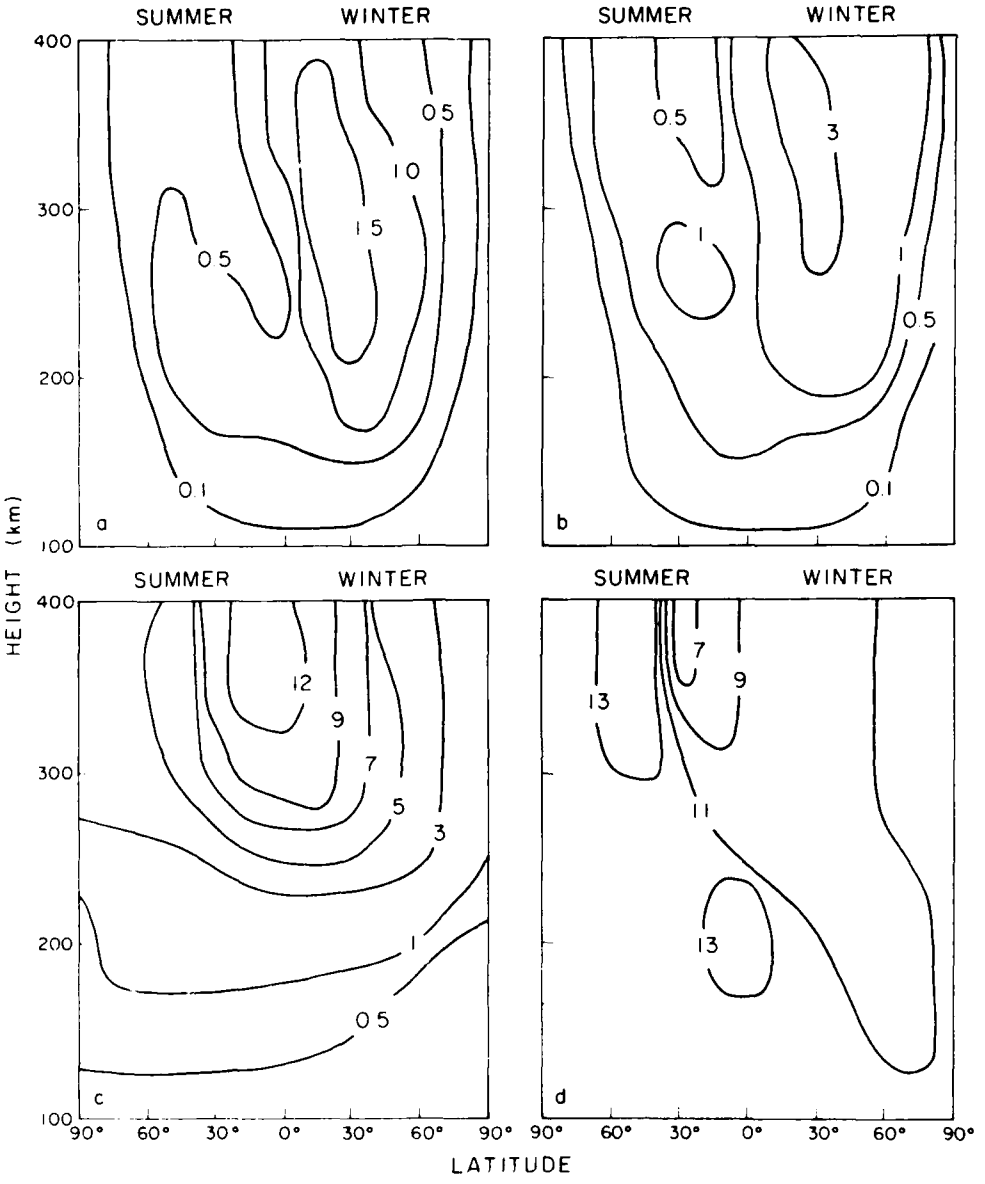

Figure 5. Contours (for December Solstice) Representing Ion Drag in Terms of (100 ε_n/ω) (ε_n/ω ranges from 10^{-2} to 12×10^{-2}) where ω = earth's rotation rate and ε_n is the harmonic component of the ion drag coefficient; (a) semidiurnal amplitude for $\overline{T}_o$ = 800 K; (b) semidiurnal amplitude for $\overline{T}_o$ = 1200 K; (c) zonal mean for $\overline{T}_o$ = 1200 K; and (d) semidiurnal phase (LT) for $\overline{T}_o$ = 800 K

3.5 Eddy Diffusivity

As will be demonstrated in subsequent parts of this study, short wavelength modes are affected by realistic values of eddy diffusivity in the mesosphere. Three ad hoc profiles of K_{eddy} to evaluate these effects are illustrated in Figure 6. These are designated "low," "moderate," and "high," for K_{eddy} values in the mesosphere and lower thermosphere of order 10^5 cm^2/sec, 5×10^5 cm^2/sec, and 5×10^6 cm^2/sec, respectively.

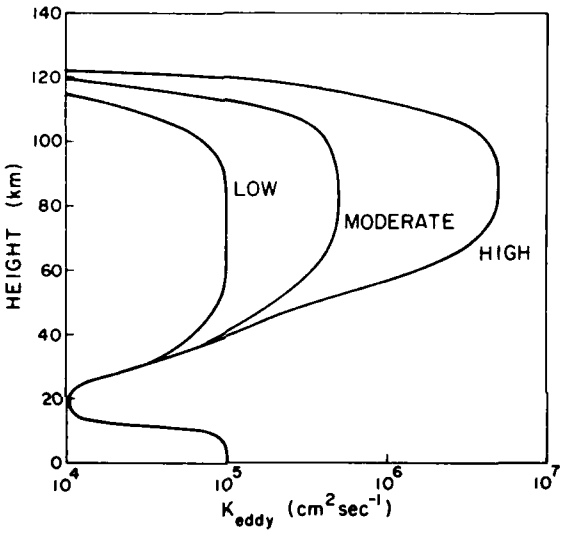

Figure 6. Contours of Eddy Diffusivity for Low, Moderate, and High Mesospheric Mixing Rates

4. EXCITATION MECHANISMS

4.1 Thermal Forcing

Atmospheric tides are excited primarily by diurnal variations in H_2O insolation absorption in the troposphere and lower stratosphere, in O_3 insolation absorption in the mesosphere, in EUV and UV radiation absorption in the thermosphere, in ion-neutral momentum coupling in the F-region, and by lunar time variations in gravitational forcing. For almost a decade the heating rates due to insolation absorption by O_3 and H_2O as given by Chapman and Lindzen[17] have been widely used in tidal studies. The present study adopts more up-to-date determinations of the tidal forcing due to O_3 and H_2O insolation absorption (Forbes and Garrett[14])

which differ from those of Chapman and Lindzen[17] in their vertical structure and seasonal dependence. Forbes and Garrett[14] compute the O_3 and H_2O heating rates as functions of height, latitude, season, and local time, Fourier decompose the heating rates into subharmonics of a solar day (that is, periods of 24, 12 and 8 hours), and at each height decompose the latitude structure corresponding to a given period into Hough modes. As discussed in Forbes and Garrett[14] the major heating for both H_2O and O_3 is associated with the (1, -2) and (2, 2) modes. Further, in contrast to the heating profiles presented by Chapman and Lindzen,[17] the vertical heating structures vary with season, with tidal period, and between different Hough modes of the same period. For instance, the magnitude of the (2, 4) heating relative to (2, 2) and its seasonal variability are significantly greater for the Forbes and Garrett[14] calculations than the magnitude indicated by Chapman and Lindzen[17] and utilized by Hong and Lindzen.[22] The relative importance of direct thermal forcing of higher order modes such as (2, 4), (2, 5), and (2, 6) in comparison to indirect forcing by "mode coupling" due to interactions with background winds must therefore be reexamined. One study using similarly revised heating rates has been performed by Walterscheid et al.[21]

Solar EUV is the most important source of in-situ excitation of thermospheric tides. The solar EUV spectrum and its dependence on the solar cycle is still open to uncertainty. Here, we adopt the method of Garrett and Forbes,[23] in which the thermospheric tidal heating rates are fixed by calibrating computed tidal temperatures with those measured by incoherent scatter radar. Explicit profiles of heat and momentum sources driving atmospheric tides are presented in subsequent parts of this study.

4.2 Ion-Neutral Momentum Coupling

Hydromagnetic effects enter through a Lorentz force in the horizontal momentum equations. The Lorentz force can be approximated by terms of the form εv where ε represents the ion drag coefficient and v is a component of horizontal velocity (electron velocities are neglected in comparison; Forbes and Garrett[16]). To linearize, we expand ε and v as follows:

$$\varepsilon \approx \varepsilon_0 + \varepsilon_1^+ e^{i\sigma t} + \varepsilon_1^- e^{-i\sigma t} + \varepsilon_2^+ e^{2i\sigma t} + \varepsilon_2^- e^{-2i\sigma t}$$

$$v \approx v_0 + v_1^+ e^{i\sigma t} + v_1^- e^{-i\sigma t} + v_2^+ e^{2i\sigma t} + v_2^- e^{-2i\sigma t}$$

then

$$
\begin{aligned}
v \approx\ & \varepsilon_0 v_0 + \varepsilon_1^+ v_1^- + \varepsilon_1^- v_1^+ + \varepsilon_2^+ v_2^- + \varepsilon_2^- v_2^+ && \text{(mean terms)} \\
& + (\varepsilon_0 v_1^+ + \varepsilon_1^+ v_0 + \varepsilon_1^- v_2^+ + \varepsilon_2^+ v_1^-)\, e^{i\sigma t} \\
& + (\varepsilon_0 v_1^- + \varepsilon_1^- v_0 + \varepsilon_1^+ v_2^- + \varepsilon_2^- v_1^+)\, e^{-i\sigma t} && \text{(diurnal terms)} \\
& + (\varepsilon_0 v_2^+ + \varepsilon_1^+ v_1^+)\, e^{2i\sigma t} \\
& + (\varepsilon_0 v_2^- + \varepsilon_1^- v_1^-)\, e^{-2i\sigma t} && \text{(semidiurnal terms)} \\
& + \text{terdiurnal and quatradiurnal terms}
\end{aligned}
$$

Inclusion of only terms proportional to ε_0 in the momentum equations implies that "temporal coupling" is neglected. In the present study the semidiurnal and terdiurnal terms in the above expansion are treated as momentum source terms in Eqs. (10)-(13). For instance, since coupling can be neglected for the diurnal tide (Forbes and Garrett[16]), a semidiurnal momentum source term can be independently computed from the diurnal tidal winds and the diurnal harmonic of the ion drag coefficient. Then, coupling of the diurnal and semidiurnal tidal winds with the semidiurnal and diurnal ion drag components, respectively, gives rise to a terdiurnal source term.

4.3 Gravitational Forcing

The lunar semidiurnal gravitational potential is known with much greater precision than thermal forcing mechanisms. Decomposition of the gravitational potential as given by Siebert[11] into Hough functions gives (Chapman and Lindzen[17])

$$\hat{\Omega} = -2.3662\, \Theta_{2,2} \ -0.5615\, \Theta_{2,4} + \ldots$$

in m^2/sec^2.

5. THE SOLAR DIURNAL TIDE

5.1 Excitation

Hough functions and velocity expansion functions for the diurnal tidal modes of practical importance are shown in Figure 7. Note that while the Hough functions are orthogonal:

$$\int_{-1}^{1} \Theta_n \Theta_m \, d\mu \quad \begin{cases} = 0 & n \neq m \\ = 1 & n = m \end{cases}$$

where $\mu = \cos \theta$ and θ is the colatitude, it is simple to show[35] that the velocity expansion functions are orthogonal with respect to the weighting function $\rho = \sigma^2 - f^2$:

$$\int_{-1}^{1} \rho \, V_n V_m \, d\mu \quad \begin{cases} = 0 & n \neq m \\ = 1 & n = m \end{cases}$$

where V = westerly or northerly expansion functions from classical tidal theory, σ = wave frequency, and f = coriolis frequency. Figure 8 shows the corresponding vertical profiles of diurnal heating rates due to H_2O and O_3 insolation absorption (multiplied by the factor $e^{-x'/2}$ where $x' = -\ell n\,(p/p_o)$ to reflect the relative importance of the various heating rates more realistically). The major heating for both H_2O and O_3 is associated with the symmetric (1, -2) mode. The (1, 1) and (1, -4) symmetric modes are excited with about equal strength, but with amplitudes from 20 to 25 percent of the (1, -2) heating rates. Seasonal variability of these symmetric modes is about 10 percent or less; the asymmetric (1, -1) mode accounts for most of the seasonal variability in the diurnal tidal forcing.

Thermospheric tides are forced in-situ by absorption of EUV (200-1000Å) and UV (1200-1750Å, Schumann-Runge continuum; 1750-2000Å, Schumann-Runge band system) radiation between 90 and 200 km. Like the O_3 and H_2O insolation absorption heating rates, the EUV and UV heating rate, once known, is Fourier decomposed into subharmonics of a solar day. However, it is conventional to retain the Fourier representation of the thermospheric heating profiles since Hough modes are not eigenfunctions of the tidal system in a viscous atmosphere. Further, due to uncertainties in the absolute values of the EUV and UV solar fluxes, thermospheric models are often tuned to yield observed diurnal temperature oscillation

35. Tung, K.K., private communication.

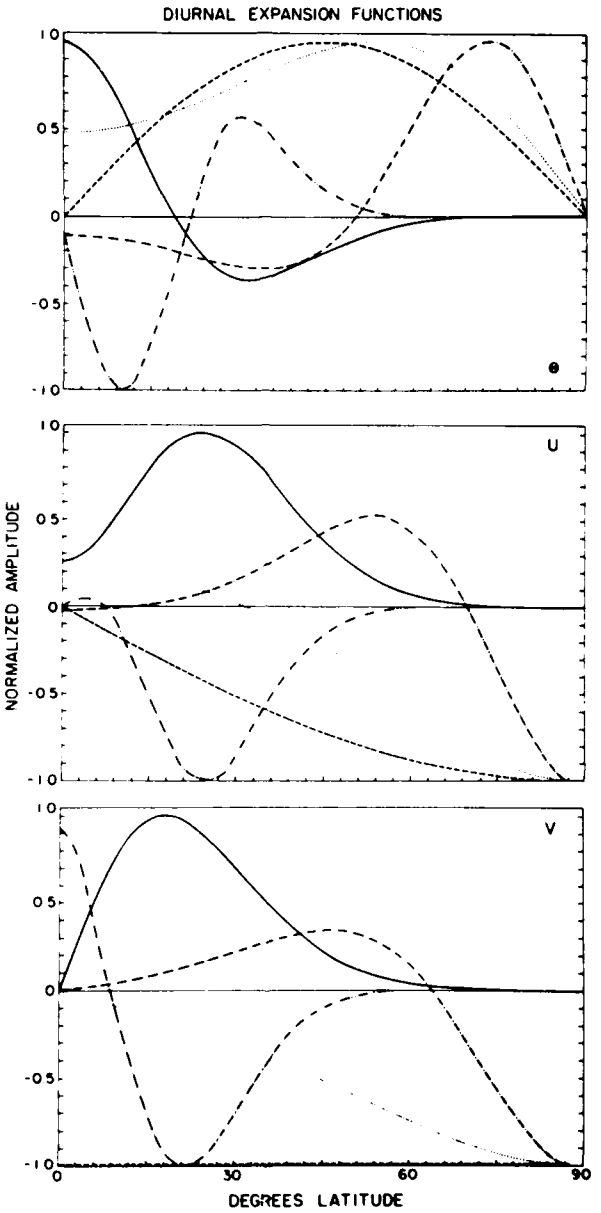

Figure 7. Top: Hough Functions for Diurnal Modes Normalized to a Maximum Value of Unity. Keys and normalization factors for each Hough mode are: (1, 1) (——, 0.606); (1, -1) (—— ——, 1.034); (1, -2) (· · · ·, 1.054); (1, -4) (—— · ——, 0.513); (1, 2) (—— · · ——, 0.641). Bottom: Northerly velocity expansion functions for diurnal modes normalized to a maximum value of unity. Normalization factors, are, respectively, 0.026, 0.126, 0.100, 0.024, 0.015. Center: Westerly velocity expansion functions for diurnal modes normalized to a maximum value of unity. Normalization factors are, respectively, 0.038, 0.130, 0.100, 0.024, 0.018

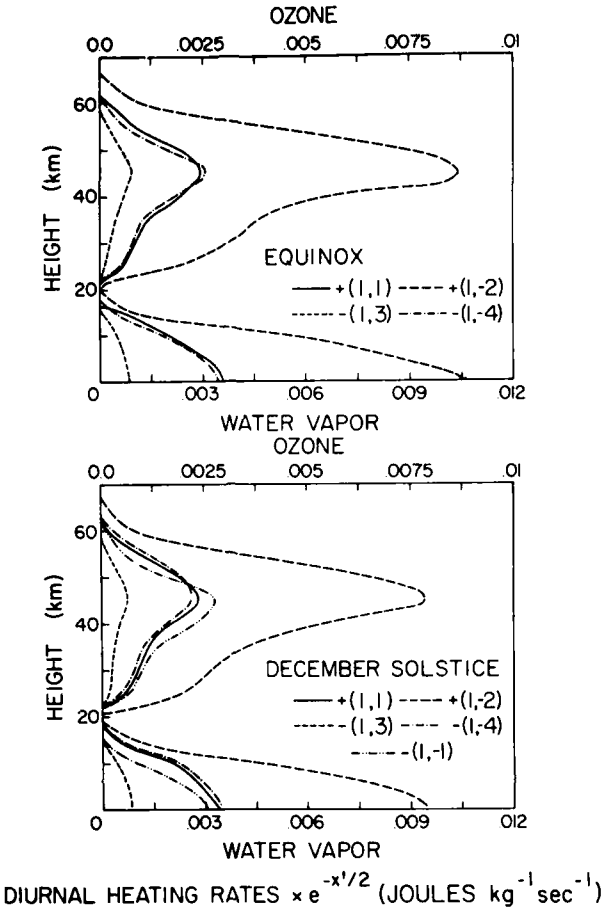

Figure 8. Hough Decomposition of Diurnal Heating Rates at Equinox (top) and December Solstice (bottom) Due to Insolation Absorption by H_2O and O_3, and Multiplied by the Factor $e^{-x'/2}$ where $x' = -\ell n\ (p/p_o)$

amplitudes. This is possible since the diurnal thermospheric tide is excited almost exclusively in-situ, and is sufficiently large so that a reliable experimental determination of its amplitude can be made. The shape of the local time variation of heating at a given height and latitude, which depends on the thermal and compositional structure of the background atmosphere, in turn fixes the amplitudes of the mean, semidiurnal, and terdiurnal heating components relative to the diurnal component.

Forbes and Garrett[7] first utilized such a tuning procedure to approximate the diurnal variation of exospheric temperature at the equator inferred by Jacchia and Slowey[36] from satellite drag measurements over a wide range of solar conditions. An independent check (Forbes and Garrett[37]) of the diurnal temperature oscillation amplitudes at midlatitudes showed excellent agreement with the incoherent scatter data published by Salah et al,[15] which represent a combination of Millstone Hill (42°N) and St. Santin (45°N) observations from 1969 to 1972 ($100 \lesssim F_{10.7} \lesssim 200$). The Millstone Hill data analyzed by Salah et al[15] is of the "one-pulse" type, and in its uncorrected form is generally inferior to the "two-pulse" data available at Millstone Hill since January 1976 (Oliver[38]). Based on recent analyses of two-pulse Millstone Hill data by Oliver[38] and Hagan et al,[39] the present model is calibrated to a diurnal exospheric temperature oscillation amplitude of 110 K for a mean exospheric temperature of 1000 K for equinox conditions at Millstone Hill. These authors are planning journal articles which will address calibration of the model over a wide range of conditions and interpretation of the corresponding incoherent scatter data.

Diurnal heating profiles calculated using the formulation of Forbes and Garrett[8] are illustrated in Figure 9. The upper and lower peaks are due to EUV and UV absorption, respectively. In addition, the increase in altitude of the peaks as the zenith angle (χ) increases is clearly evident. For an overhead sun ($\chi = 0$) the UV and EUV absorption peaks lie at $z \approx 100$ km and $z \approx 130$ km, respectively, with corresponding peak total heating rates of 5.0×10^{-7} J/m^3 sec and 1.66×10^{-8} J/m^3 sec. The total height-integrated heat inputs for $\chi = 0$ correspond to values of $\overline{\varepsilon F_\infty} \approx .3$ erg/cm^2 sec for UV and $\overline{\varepsilon F_\infty} \approx 0.70$ erg/cm^2 sec for EUV excitations, where ε is the heating efficiency, F_∞ is the unattenuated solar flux, and the overbar represents an average over the relevant wavelength bands. While it is recognized the ε may exhibit some height dependence (Torr et al[40]), this does not appreciably affect values of the integrated heat input quoted above.

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36. Jacchia, L.G., and Slowey, J.W. (1968) Diurnal and seasonal-latitudinal variations in the upper atmosphere, Planet. Space Sci. 16:509-524.

37. Forbes, J.M., and Garrett, H.B. (1979) The solar cycle variability of diurnal and semidiurnal thermospheric temperatures, J. Geophys. Res. 84:1947-1949.

38. Oliver, W.L. (1980) Improved Millstone Hill exospheric temperature measurements: evidence for a seasonal variation of the magnetic activity effect, J. Geophys. Res. 85:4237-4247.

39. Hagan, M.E., Forbes, J.M., Satyanarayana, P., and Oliver, W.L., unpublished data.

40. Torr, M.R., Richards, P.G., and Torr, D.G. (1980) A new determination of the ultraviolet heating efficiency of the thermosphere, J. Geophys. Res. 85:6819-6826.

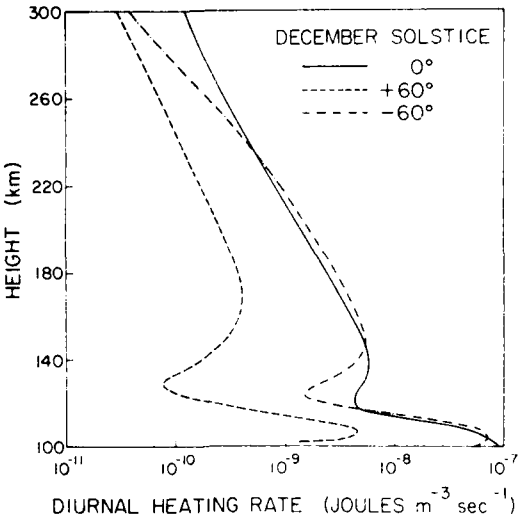

Figure 9. Diurnal Heating Rates for December Solstice at 0, 60, and -60° Latitude Due to UV and EUV Absorption in the Thermosphere

5.2 Special Treatment of the Diurnal Propagating Tide

As discussed previously, satisfactory numerical convergence could not be attained for the (1, 1) mode excited by H_2O and O_3 insolation absorption using the present eighth-order viscous model and grid spacings of $\delta\theta = 6^{\circ}$ and $\delta x = 0.05$. (From the standpoint of computational economy on a CDC 6600 machine, smaller grid spacings were deemed unacceptable.) The alternative adopted in this situation is to utilize an f-plane "equivalent" gravity wave formalism (Forbes and Hagan[29]) to compute the (1, 1) tidal fields. The equivalent gravity wave formalism provides an accurate description of the short-wavelength ($\lambda_z \approx 30$ km) (1, 1) mode since severe damping occurs at altitudes ($z \lesssim 105$ km) below the level ($z \gtrsim 150$ km) where the time scale for friction is long compared to the wave period and hence the damping occurs before significant changes in horizontal shape occur (Lindzen[5]). Further, the diurnal tidal fields for $z \gtrsim 150$ km are dominated by those excited by in-situ absorption of UV and EUV radiation. Finally, since the (1, 1) mode is restricted to tropical latitudes where meridional temperature gradients are weak and the mean flow is slow compared to the phase speed of the wave, mode coupling is expected to be small, and the assumption of an unperturbed atmosphere which is dependent on height alone is therefore adequate for present purposes.

The f-plane equivalent gravity wave model was first tested using the Chapman and Lindzen[17] H_2O and O_3 heating functions in an atmosphere which is "almost inviscid" below 100 km and possesses a realistic exponential increase in molecular dissipation above 100 km. The results show excellent agreement with computations based on classical tidal theory below 90 km. However, these and similar computations utilizing the Forbes and Garrett[14] heating profiles yield amplitudes at 110 km of over 200 K (0^o latitude) and 200 m/sec (18^o latitude) for temperature and northerly velocity, respectively, which are at least a factor of 3 greater than that indicated by radar observations at Arecibo (Mathews,[41] Harper[42]) and rocket measurements at Natal (Smith et al[43]). This discrepancy between theory and observation can be reconciled by recognizing the effects of eddy diffusion of heat and momentum in the mesosphere and lower thermosphere (80-110 km); for a 24-hour period wave with 30 km vertical wavelength it is simple to show that significant damping can occur for mesospheric eddy diffusivities in excess of 10^6 cm^2/sec, which is a conservative value among those quoted in the literature. Lindzen[44] originally postulated that turbulence in the tropical mesosphere might in fact be generated by unstable breakdown of the tidal wave above 80 km, and that the "convectively adjusted" amplitudes would be more in line with the type of observations quoted above. As an alternate, more quantitative approach, Lindzen and Forbes[45] use the f-plane model of Forbes and Hagan[29] to investigate the production of turbulence in the tropical mesosphere and lower thermosphere by a cascade of energy from stable tidal waves to waves of smaller scale which eventually become unstable.

At this point the physics of mutual coupling between the diurnal tide and mesospheric turbulence are uncertain, and one must resort to a semi-empirical approach to obtain a realistic and usable model of the diurnal propagating tide in the mesosphere and lower thermosphere. In the present model the Lindzen and Forbes[45] study is utilized as the physical basis for the calculations, which are basically calibrated to conform to limits set by observational data. This formalism[45] assumes power laws for the cascade process of the form

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41. Mathews, J.D. (1977) Measurements of the diurnal tides in the 80 to 100 km altitude range at Arecibo, J. Geophys. Res. 81:4671-4677.

42. Harper, R.M. (1981) Some results on mean tidal structure and day-to-day variability over Arecibo, J. Atmos. Terr. Phys. 43:255-262.

43. Smith, W.S., Theon, J.S., Swartz, P.C., Katchen, L.B., and Horvath, J.J. (1968) Temperature, Pressure, and Wind Measurements in the Stratosphere and Mesosphere, NASA TR-288, Washington, D.C.

44. Lindzen, R.S. (1968) The application of classical atmospheric tidal theory, Proc. Roy. Soc. A303:299-316.

45. Lindzen, R.S., and Forbes, J.M. (1982) Turbulence generation by stable waves and tides, submitted to J. Geophys. Res. 1982.

$$T_{\lambda'} \sim T_{\lambda} \left(\frac{\lambda}{\lambda'}\right)^{\alpha}$$

$$w_{\lambda'} \sim \frac{\omega T_{\lambda}}{\Gamma} \left(\frac{\lambda}{\lambda'}\right)^{\beta}$$

where

T = temperature

w = vertical velocity

ω = frequency

$\Gamma = \frac{dT_o}{dz} + \frac{g}{c_p}$ = static stability

λ, λ' = wavenumbers at any two points in the spectral domain

α, β = "power laws" of cascade process

thus leading to an eddy diffusion coefficient given by

$$D = D_{max} \left(\frac{\lambda T}{\Gamma}\right)^{\frac{2-\alpha+\beta}{1-\alpha}}$$

where $\lambda T = \frac{\partial}{\partial z}(\delta T_{diurnal})$ and if $\frac{\lambda T}{\Gamma} > 1$ then $\frac{\lambda T}{\Gamma}$ is set equal to 1. D_{max} is the eddy diffusion that causes exponential growth of the tidal oscillation to cease. Taking $D_{max} = 2 \times 10^6$ cm^2/sec and $\alpha = \beta = \frac{1}{3}$, the macroscopic tidal fields and the eddy diffusion profiles are iteratively adjusted until the process converges to a solution. This results in a D profile which peaks at a value of 2×10^6 cm^2/sec at 102 km, and a diurnal temperature oscillation profile which peaks at about 75 K at 110 km. These results are not very sensitive to the choice of α and β. However, the tidal fields obtained by the procedure are larger than those obtained, on the average, by rocket soundings and radar observations (see Sec. 5). This implies that either another source of turbulence (that is, gravity waves) has been neglected, or the value of D_{max} for the (1, 1) mode has been underestimated (no more than a factor of 2 accuracy is claimed in the choice of D_{max}). For present modeling purposes, therefore, the final D-profile of the iterative procedure has been adjusted to a maximum value of 5×10^6 cm^2/sec at 102 km, yielding temperatures and winds more in line with current observational evidence. The corresponding profiles of eddy diffusion coefficient and (1, 1) tidal fields are illustrated in Figure 10.

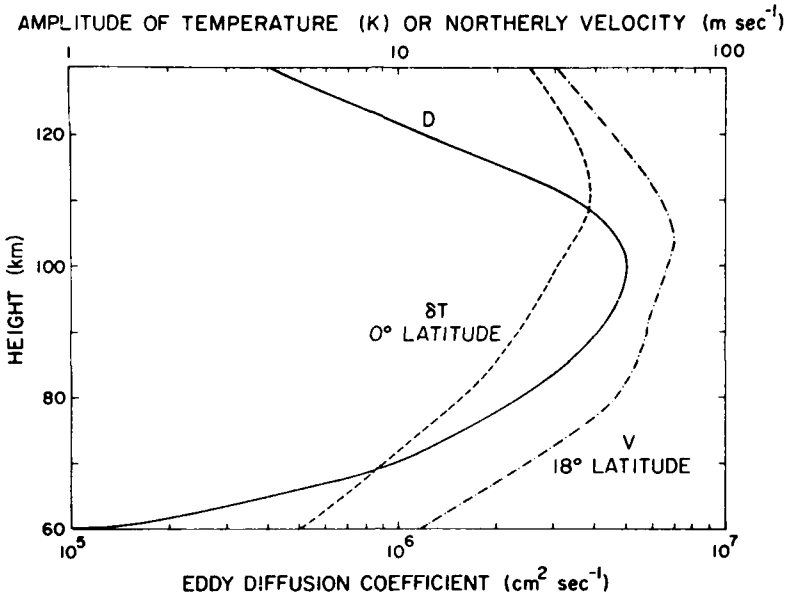

Figure 10. Temperature at 0^{O} Latitude, Northerly Velocity at 18^{O} Latitude, and Eddy Diffusion Coefficient (D) Corresponding to (1, 1) Diurnal Propagating Tide in the Present Model

5.3 Explicit Winds and Temperatures

Amplitude and phase vertical structures of the westerly, northerly, and vertical winds, and of temperature for the solar diurnal tide at equinox and solstice from the surface to 400 km altitude at 0, 18, 42, and 60^{O} latitude are illustrated in Appendix A along with tabulations of all data at 6^{O} latitude increments in Appendix B. The following features exhibited in the plots are worth noting:

(1) Below 100 km at low latitudes the exponential amplitude growth and phase progression ($\lambda_z \approx 30$ km) with height are characteristic of the (1, 1) diurnal propagating tide. The (1, 1) mode attains its peak amplitudes near 110 km, and decays rapidly above this height due to molecular dissipation.

(2) Below 100 km at high latitudes the relative absence of amplitude growth and phase progression with height is indicative of the (1, -2) trapped mode. Superposition of the (1, 1) and (1, -2) modes accounts for the illustrated changes in vertical structure of the diurnal tidal winds and temperatures.

(3) Amplitudes and phases of u, v, and δT asymptotically approach constant values above about 200 km. This behavior is consistent with the dominance of diffusion in the upper thermosphere, and with the condition that there be no sources of heat or momentum in the upper thermosphere.

(4) Diurnal tidal oscillations in the 90-150 km region receive about equal contributions from upward propagating and in-situ excited components.

6. THE SOLAR AND LUNAR SEMIDIURNAL TIDES

6.1 Excitation

The semidiurnal thermal excitation, like the diurnal, is obtained by Fourier decomposing the local time variations of the heating rates as a function of height and latitude. For the forcing due to insolation absorption by H_2O and O_3, the latitude structure of the 12-hour component at each height is decomposed into Hough modes. The semidiurnal Hough functions and horizontal velocity expansion functions of practical importance are illustrated in Figure 11. Figure 12 shows the corresponding vertical profiles of semidiurnal H_2O and O_3 heating rates calculated by Forbes and Garrett,[14] multiplied by the factor $e^{-x'/2}$ where $x' = -\ell n\,(p/\rho_o)$ to reflect the relative importance of the various heating rates more realistically. The major heating for both H_2O and O_3 is associated with the (2, 2) mode, with less than 20 percent seasonal variation. In contrast to the heating profiles presented by Chapman and Lindzen,[17] the vertical structures vary with season, with tidal period (see Figure 8), and between different Hough modes of the same period. The relative importance of higher-order semidiurnal modes during equinox is significantly greater for the Forbes and Garrett[14] O_3 calculations than indicated in Chapman and Lindzen,[17] whereas for H_2O the relative amplitudes are about the same. This is best described in terms of the ratios of peak heating amplitudes, (2, 6):(2, 4):(2, 2), which for O_3 heating is 0.15:0.26:1.0 for Chapman and Lindzen and 0.25:0.42:1.0 for Forbes and Garrett; for H_2O heating, these ratios are 0.15:0.26:1.0 and 0.17:0.30:1.0, respectively. Significant (25-100 percent) seasonal variations in the O_3 and H_2O semidiurnal heating rates are indicated for the (2, 4) and (2, 6) modes. In addition, the Forbes and Garrett[14] calculations include the (2, 3) and (2, 5) antisymmetric components of the thermal excitation, whereas the profiles of Chapman and Lindzen[17] do not include any seasonal effects whatsoever. All of the general features and many specific details of the Forbes and Garrett[14] heating profiles have been verified in subsequent heating rate calculations by Walterscheid et al[21] and Bernard.[46]

As discussed in Section 5, the thermospheric EUV heating rates in the present model are tuned to yield the same diurnal exospheric temperature oscillation amplitudes as the Thomson scatter measurements at Millstone Hill. This is

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46. Bernard, R. (1981) Seasonal variation in mesospheric semidiurnal tides. Comparison of meteor radar observations and results from an excitation source model, J. Atmos. Terr. Phys. 43:101-109.

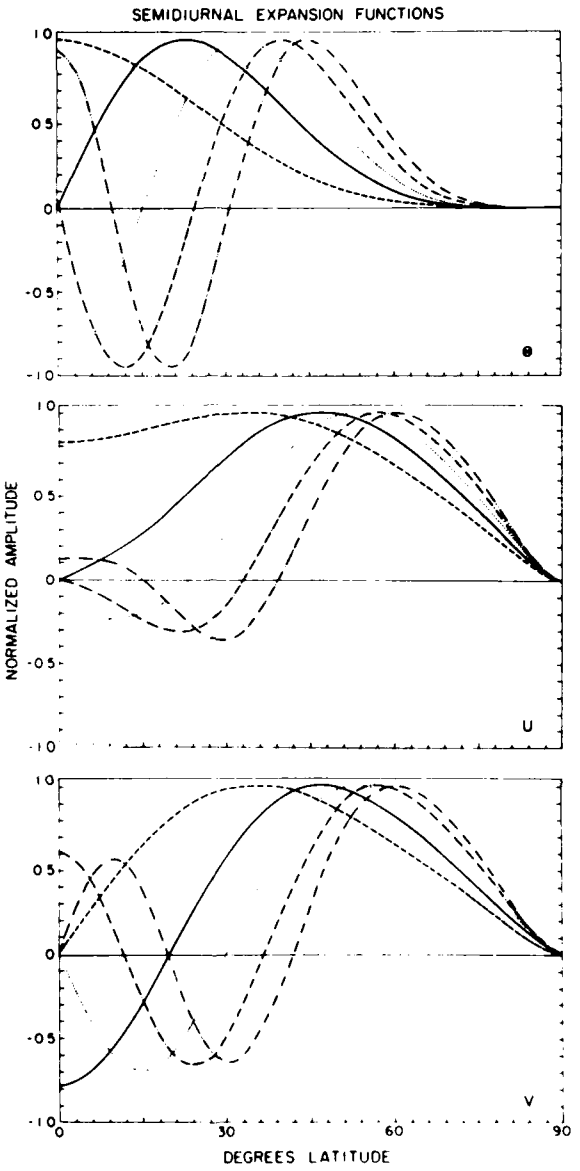

Figure 11. Top: Hough Functions for Solar Semidiurnal Modes Normalized to a Maximum Value of Unity. Keys and normalization factors for each Hough mode are: (2, 2) (— — — —, 0.855); (2, 3) (——, 0.917); (2, 4) (· · · ·, 0.926); (2, 5) (— · —, 0.935); (2, 6) (— · · —, 0.935). Bottom: Northerly velocity expansion functions for solar semidiurnal modes normalized to a maximum value of unity. Normalization factors are, respectively, 0.326, 0.171, 0.110, 0.078, and 0.060. Center: Westerly velocity expansion functions for solar semidiurnal modes normalized to a maximum value of unity. Normalization factors are, respectively, 0.355, 0.182, 0.115, 0.081, and 0.062. Due to the small difference between the solar and lunar semidiurnal periods, these structures also represent good approximations to the lunar semidiurn. expansion functions

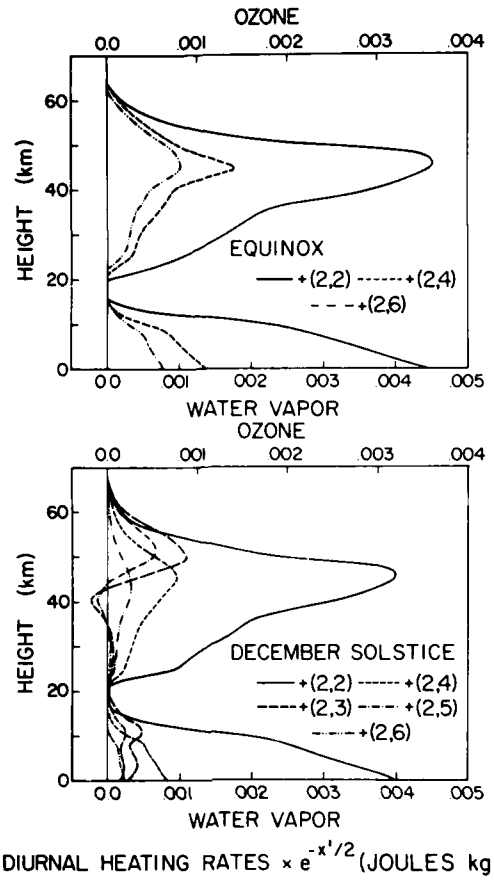

Figure 12. Hough Mode Decomposition of Semidiurnal Heating Rates at Equinox (top) and December Solstice (bottom) Due to Insolation Absorption by H_2O and O_3, and Multiplied by the Factor $e^{-x'/2}$ where $x' = -\ell n\,(p/p_o)$

possible since the diurnal thermospheric tide is excited almost exclusively in-situ, and is sufficiently large that a reliable experimental determination of its amplitude can be made. The shape of the local time variation of heating at a given height and latitude, which depends on the thermal and compositional structure of the background atmosphere, in turn fixes the amplitude of the semidiurnal component relative to the diurnal component. Semidiurnal thermospheric heating rates constructed in this manner, utilizing the formulation of Forbes and Garrett[8] to specify the height and solar zenith angle dependence of the heating, are given in Figure 13. Note that heating rates at different levels are not necessarily in phase, since the phase depends on whether the region is optically thin (higher altitudes, thin lines) or optically thick (lower altitudes, thicker lines), with respect to either

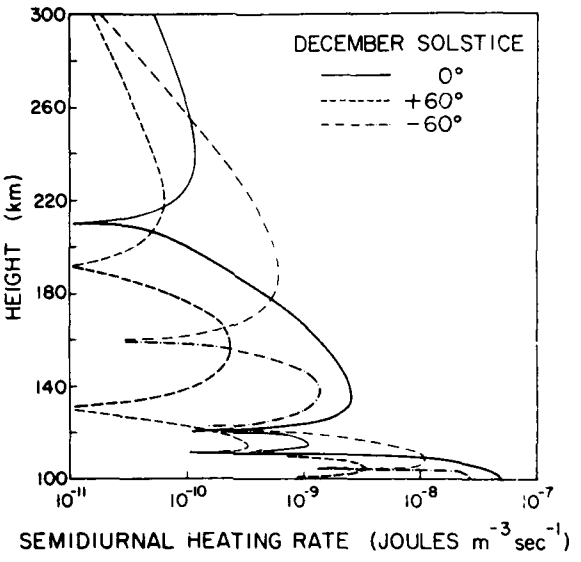

Figure 13. Semidiurnal Heating Rates for December Solstice at 0^{o}, 60^{o}, and -60^{o} Latitude Due to UV and EUV Absorption in the Thermosphere. Thicker lines show the phase = 1200 (2400) LT, whereas thinner lines show the phase = 0600 (1800) LT

EUV (upper curves) or UV (lower curves) heating. This behavior of the semidiurnal heating structures has been singled out by Dickinson et al[47] to account for the fact that the semidiurnal temperature amplitudes appearing in their thermospheric general circulation model are smaller than those published in Garrett and Forbes.[23] In fact, the Garrett and Forbes[23] study did not take into account the change in shape with height of the local time structure of heating (as did Forbes and Garrett[14]), and the present calculations essentially supersede the previous results for the semidiurnal thermosphere tide generated in-situ.

As indicated in Section 4, the coupling between mean and diurnal winds and the semidiurnal and diurnal components of ion drag, respectively, can be parameterized as momentum sources in the equations of horizontal motion for the semidiurnal thermospheric tide. Contours of the amplitude and phase for the mean, diurnal, and semidiurnal components of the ion drag coefficient are given in Figures 4 and 5. Mean winds are taken from the study by Roble et al[30] as illustrated in Figures 1 and 2, and diurnal winds are taken from the present model. Profiles of the resulting semidiurnal accelerations utilized in the present calculations are

47. Dickinson, R.E., Ridley, E.C., and Roble, R.G. (1981) A three-dimensional general circulation model of the thermosphere, J. Geophys. Res. 86: 1499-1512.

shown in Figure 14. The indicated F-region accelerations of order 10^{-2} m/sec^2 are comparable to the inertial term in the equation of motion: $u \frac{4\pi}{\tau} \approx 0.7 \times 10^{-2}$ m/sec^2 for τ = 24 h (86,400 sec) and u = 50 m/sec.

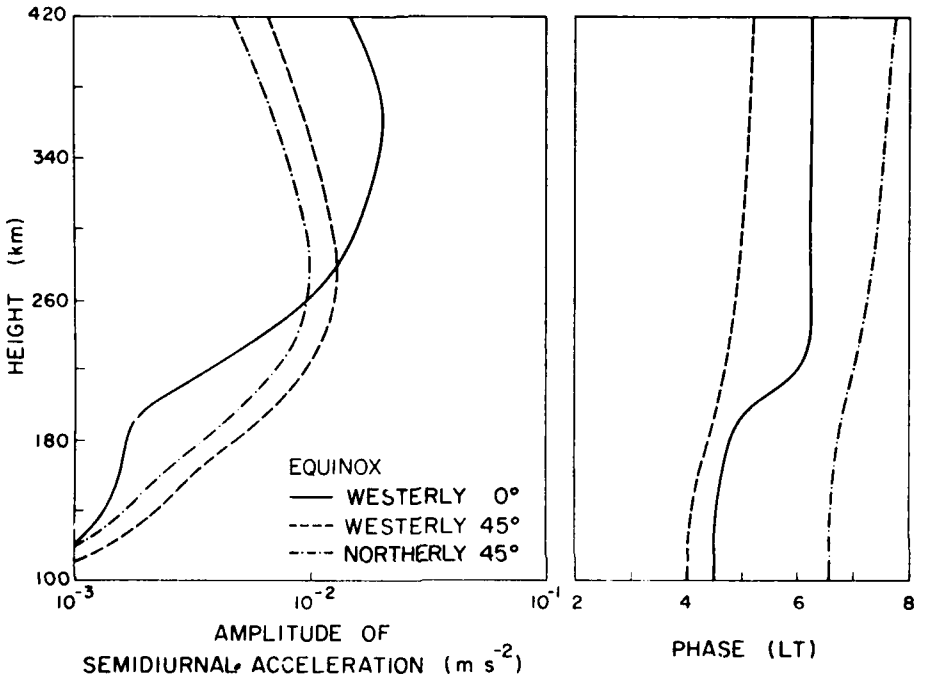

Figure 14. Semidiurnal Accelerations Due to Coupling Between Mean and Diurnal Winds, and Semidiurnal and Diurnal Components of Ion Drag, Respectively

It has been suggested in the recent literature (Lindzen,[48] Hamilton,[49]) that latent heat release in clouds might provide a forcing mechanism for tides which could explain some discrepancies between observed and computed semidiurnal surface pressure oscillations (Lindzen[48]). Because including these sources of excitation would only modify the details of the tropospheric tidal distributions, whereas the present emphasis is on the simulation of winds and temperatures aloft ($\gtrsim$50 km), tidal excitation due to latent heat release in clouds has been neglected in the present model.

48. Lindzen, R.S. (1978) Effect of daily variations of cumulonimbus activity on the atmospheric semidiurnal tide, Mon. Weather Rev. 106:526-533.

49. Hamilton, K. (1981) Latent heat release as a possible forcing mechanism for atmospheric tides, Mon. Weather Rev. 109:3-17.

6.2 "Mode Coupling" and Penetration of Propagating Tides into the Thermosphere

In an inviscid atmosphere where the unperturbed temperature is independent of latitude, the tidal equations are separable and classical tidal theory applies; the eigensolutions (Hough functions) of Laplace's tidal equation define the horizontal structure of each mode and the eigenvalues (equivalent depths) fix each mode's vertical structure. In the presence of mean winds and meridional temperature gradients or molecular and eddy dissipation, the equations are rendered inseparable and techniques similar to those employed in the present study must be utilized. However, in theoretical studies (Lindzen and Hong,[18] Walterscheid et al[19, 20, 21]) of solar semidiurnal tides below 100 km it has nevertheless been found useful to interpret the indirect excitation of tidal modes due to the inseparability of the system as a type of "mode coupling". Indeed, it is instructive to begin interpretation of the present numerical simulations by examining the Hough decomposition of solar semidiurnal tidal temperatures excited by H_2O and O_3 insolation absorption, as illustrated in Figure 15 for solstice conditions. Below 60 km the atmosphere's semidiurnal response can be attributed to the (2, 2) mode, consistent with its preferential thermal excitation. Between 50 and 70 km exponential growth (2, 2) is interrupted, due in part to a tendency towards evanescent behavior connected with the unperturbed thermal structure, but also due to "coupling" into the higher order modes (2, 3), (2, 4), and (2, 5). Average vertical wavelengths, over the 0-100 km height region, range between about 90 and 150 km for the (2, 3) and (2, 2), and 35-45 km for the (2, 5) and (2, 4) modes, with the lower values corresponding to the asymmetric modes. The higher-order modes maintain an exponential growth with height throughout the 50-100 km region. In fact, the semidiurnal tide is comprised of about equal contributions from the (2, 2), (2, 3), and (2, 4) modes between 70 and 90 km, but predominantly the (2, 4) mode with some contribution from the (2, 5) and (2, 2) modes between 90 and 120 km. Thus, the meteor wind region (80-100 km) is characterized by the joint presence of at least four semidiurnal modes whose relative amplitudes and phases change with height and latitude. This suggests that vertical structures of the total semidiurnal wind and temperature fields vary significantly with latitude; or equivalently, that the horizontal structures differ at various heights. Above 120 km the short-wavelength (2, 4) and (2, 5) modes are preferentially damped due to the exponential increase in molecular dissipation. Thus, the semidiurnal oscillation above 140 km is associated predominantly with the (2, 2) mode, with secondary contributions from the (2, 4) and (2, 5) modes.

The solstitial lunar semidiurnal tide is similar to the solar tide, as illustrated in Figure 16, and is mainly associated with the (2, 2) mode below 70 km. However, the (2, 4) mode becomes predominant between 80 and 110 km, with secondary

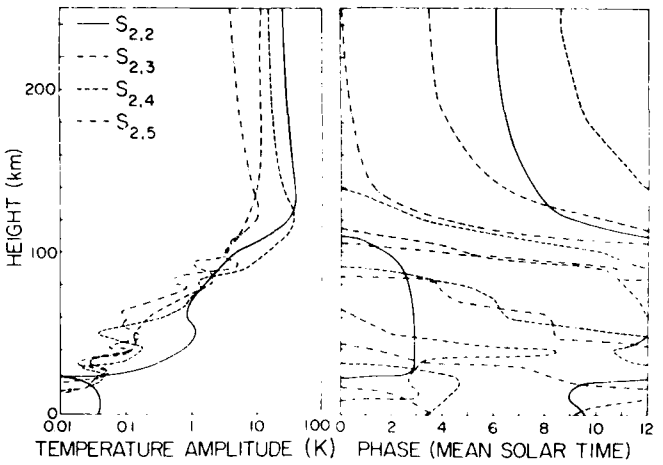

Figure 15. Hough Mode Decomposition of Solar Semidiurnal Solstitial Temperatures Due to Forcing by H_2O and O_3 Insolation Absorption Alone

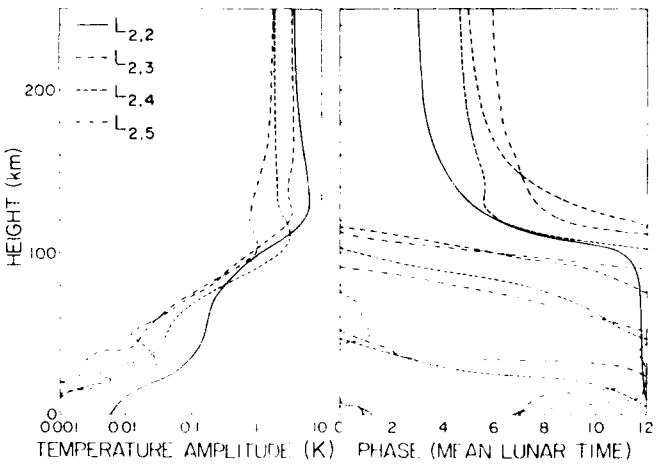

Figure 16. Hough Mode Decomposition of Lunar Semidiurnal Solstitial Temperatures Due to Gravitational Forcing

contributions from the (2, 2), (2, 3), and (2, 5) modes. Above 120 km the (2, 2) mode once again assumes the primary role, with a fairly strong secondary contribution from the (2, 3) mode. Clearly, but not surprisingly, "mode coupling" due to mesospheric mean winds and meridional temperature gradients is as important for the lunar tide as for the solar semidiurnal tide. This result was anticipated by on the basis of simpler models by Sawada,[50] Kusuda and Sawada,[51] Miyahara,[52] Pokrovskii et al,[53] and Evans.[54]

Similar descriptions for both the solar and lunar oscillations apply at equinox, except that the asymmetric (2, 3) and (2, 5) modes are absent.

As mentioned in Section 5.2, the eddy diffusion coefficient (D_1) necessary to cause the cessation of exponential growth with height for the (1, 1) mode (vertical wavelength $\lambda_1 \approx 30$ km; frequency $\sigma_1 = 2\pi/24$ h) is approximately 2×10^6 cm^2/sec. For the (2, 4) mode ($\lambda_2 \approx 45$ km; $\sigma_2 = 4\pi/24$ h), $D_2 \approx D_1 \frac{\sigma_2}{\sigma_1} \left(\frac{\lambda_2}{\lambda_1}\right)^2 = 9 \times 10^6$ cm^2/sec. Significant damping effects on the (2, 4) and (2, 5) modes might therefore be expected for mesospheric eddy diffusivities in excess of about 2×10^6 cm^2/sec, which come within ranges commonly quoted in the literature. To investigate the influence of eddy diffusion of heat and momentum on the propagation of semidiurnal tides, a series of computer runs was performed utilizing the eddy diffusion profiles given in Figure 6 – one for low (D_1), one for moderate (D_2), and one for high (D_3) eddy diffusivity. In all three profiles K_{eddy} has a value of 10^5 cm^2/sec at the ground and 10^4 cm^2/sec at a height of 20 km. Over heights with a lower bound of 60-80 km and upper bound of 100 km, K_{eddy} for the D_1 profile is 10^5 cm^2/sec, for the D_2 profile 5×10^5 cm^2/sec, and for the D_3 profile, 5×10^6 cm^2/sec. All profiles decrease to 10^4 cm^2/sec at 120 km. Figure 17 illustrates the (2, 4) mode temperature oscillation amplitude between 60 and 180 km excited by mode coupling due solely to the interaction of the thermally-forced (2, 2) mode with background mesospheric winds (top), and including direct thermal excitation of the (2, 4) mode as well as that due to mode coupling (bottom), for the D_1, D_2, and D_3 eddy profiles. Note that even in the absence of mean winds and direct forcing (dashed

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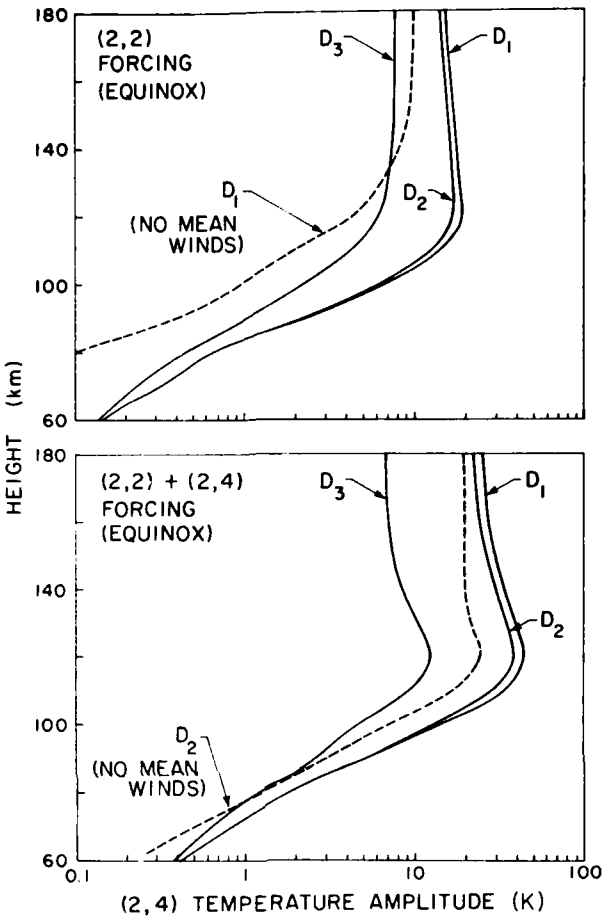

Figure 17. Temperature Oscillation Amplitudes Associated With (2, 4) Mode for the D_1, D_2, and D_3 Eddy Profiles Given in Figure 6

curve, top figure) the (2, 4) mode temperature oscillation also appears, due to distortion (mode coupling) of the (2, 2) mode in the presence of dissipation. Comparison of the dashed and solid curves for D_1 in the top figure provides a measure of the thermospheric (2, 4) mode due to "mode coupling" in the mesosphere, whereas the difference between the dashed and solid curves for D_2 in the bottom figure is due to the contribution to the (2, 4) mode from direct thermal excitation by H_2O and O_3 insolation absorption (however, due to phase differences, these amplitudes are not simply additive). Note that no significant differences in the calculated (2, 4) mode response exist between the D_1 and D_2 profiles. Significant effects occur for the D_3 profile, however. It is therefore concluded that eddy diffusivities greater than about 10^6 cm^2/sec can significantly affect the propagation of semidiurnal

tides from the mesosphere into the thermosphere and thus account for some of the seasonal and day-to-day variability observed in lower thermosphere tides.

The penetration of propagating tides into the thermosphere is discussed later in this report when the origin of the semidiurnal thermospheric tide is analyzed.

6.3 Explicit Winds and Temperatures

Amplitude and phase vertical structures of the westerly, northerly, and vertical winds, and of temperature for the solar and lunar semidiurnal tides at equinox and solstice from the surface to 400 km altitude at 0, 18, 42, and 60° latitude are illustrated in Appendix A. Tabulations of all data at 6° latitude increments are given in Appendix B. Note the following:

(1) The semidiurnal tides exhibit behavior similar to the diurnal tide; exponential growth and downward phase progression with height below 120 km, and asymptotic behavior to constant amplitudes and phases in the diffusion-dominated region above 200 km.

(2) Both the solar and lunar tides exhibit a shift from long to short vertical wavelengths above about 60 km, due to "mode coupling" in the presence of mean winds and meridional temperature gradients.

(3) Solar semidiurnal winds in the lower thermosphere have speeds as great as the diurnal winds, except that they tend to be greater at middle to high latitudes whereas the diurnal winds have the highest speeds at low latitudes.

(4) In the upper thermosphere solar diurnal and semidiurnal winds are of order 50-150 m/sec and 20-40 m/sec, respectively. However the largest (smallest) winds for the semidiurnal (diurnal) tide are found at low latitudes. Therefore, the total wind field tends to shift from an equal mixture of diurnal and semidiurnal components at low latitudes, to a predominantly diurnal wind at middle and high latitudes.

(5) On the other hand, both the solar diurnal and semidiurnal temperatures in the upper thermosphere tend to decrease with latitude, with oscillation amplitudes in ranges 50-150 K and 10-60 K, respectively.

(6) At most latitudes the lunar semidiurnal winds and temperatures above 100 km are of the order of 20 percent of the solar semidiurnal oscillations, and can thus account for a significant portion of reported day-to-day variations in the solar component. Indeed, at middle to high latitudes lunar temperature and wind oscillation amplitudes approach 10 K and 10 m/sec in the vicinity of 110-120 km, which are sufficiently large to be extracted from manageable data series if verification of these theoretical predictions were to be attempted.

6.4 Origin of the Solar Semidiurnal Thermospheric Tide

In the present model, the solar semidiurnal thermospheric tide is attributed to three sources of excitation: (1) EUV solar radiation absorption in the lower thermosphere; (2) in-situ momentum coupling due to the interaction of diurnal winds and diurnally-varying ion drag; and (3) tides of lower atmosphere origin propagating into the thermosphere. The relative importance of these various sources at 42° latitude, where extensive experimental determinations of the solar semidiurnal exospheric temperature variation exist can be evaluated from the data in Table 1. Here sources (1) and (3) account for most of the total variation, with something on the order of 25 percent being contributed by source (2). However, at low latitudes the momentum coupling source assumes primary importance, suggesting that all of these mechanisms for exciting semidiurnal thermospheric oscillations must be considered in any comprehensive modeling effort. An important feature to note is the variability of these contributions with latitude, season (see Table 1), and solar cycle (unpublished calculations) which greatly amplifies the sensitivity of the model to various parameterizations and renders interpretation of model simulations and measurements of semidiurnal thermospheric oscillations much less definitive.

In the present model the solar minimum (T_o = 800 K) semidiurnal exospheric temperature oscillation due solely to (2, 2) forcing below 100 km is about 9 K at 0° latitude and 23 K at 42° latitude. Hough mode decomposition of the corresponding latitude structure of temperature at 400 K indicates about equal contributions of 15 K from the (2, 2) and (2, 4) modes; these tend to cancel at lov latitudes and add at middle latitudes to produce this type of latitude structure. As discussed in previous sections, this component of the (2, 4) mode structure in the thermosphere is significantly affected by mode coupling associated with mean winds and meridional temperature gradients in the mesosphere (see also Lindzen and Hong,[18] Walterscheid et al[19, 20, 21]) and subsequent exponential growth above the mode coupling region. Uncertainties and variations in propagation characteristics of the mesosphere thus manifest themselves as uncertainties in upper level predictions of the model.

Hong and Lindzen[22] reviewed a number of factors which have led to continual reductions in the estimated effects of the (2, 2) mode on the upper thermosphere since the early calculations of Lindzen[13] [he predicted upper thermosphere semidiurnal temperature oscillations at the equator (δT_{eq}) of the order of 190 K at SSMIN and 140 K at SSMAX]. These factors include (1) wind-induced mode coupling below 100 km (30 percent) reduction; (2) inclusion of more realistic (nearly isotropic) ion drag (30 percent reduction); (3) mode broadening in the thermosphere (30 percent reduction at the equator). The present model simulations

Table 1. Total Semidiurnal Variation of Exospheric Temperature at 42° Latitude Due to Various Sources (T_o = 1000 K)

Source	Equinox		Summer		Winter	
	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase
(1) Semidiurnal tides of lower atmosphere origin*	17	10.9	29	8.2	16	9.1
(2) Ion-neutral momentum coupling	11	2.7	8	3.6	6	2.8
(3) Ion-neutral momentum coupling plus EUV heating	25	6.2	13	6.2	14	5.3
Total (1)+(3)	16	7.4	40	7.4	24	6.9

*The equinox breakdown in terms of Hough mode components $\delta T_{m,n}$ where

$$\delta T = \sum_{n=2}^{6} \delta T_{m,n}(z)\, \Theta_{m,n}(\theta)$$

is as follows (amplitude/phase): $\delta T_{2,2}$ = 24.5/7.0, $\delta T_{2,3} = \delta T_{2,5}$ = 0.0, $\delta T_{2,4}$ = 15.3/11.0, $\delta T_{2,6}$ = 10.8/12.4.

were started utilizing various model parameterizations outlined by Hong and Lindzen,[22] which have subsequently been upgraded using recently developed ionospheric models, heating calculations, and other improvements. Effects of these improved parameterizations on calculation of the semidiurnal variation of exospheric temperature due solely to (2, 2) forcing below 100 km are summarized in Table 2. Initial calculations indicated temperature oscillation amplitudes at the equator and 400 km of 68.7 K and 26.2 K at SSMIN and SSMAX, respectively. Replacement of the molecular thermal and viscosity coefficients suggested by Forbes and Garrett[16] and MSIS temperatures of Hedin et al[31, 32] for those originally adopted by Hong and Lindzen[22] resulted in a reduction of the temperature oscillation amplitudes to 44.6 K and 23.9 K, respectively. As discussed by Forbes and Garrett,[7] the ion drag model adopted by Hong and Lindzen[22] can be considerably improved by utilizing available comprehensive empirical models of ionospheric parameters. As indicated in Table 2, consideration of the present ion drag model reduced the calculated temperature oscillation amplitudes at SSMIN and SSMAX to 26.1 K and 25.5 K, respectively, essentially eliminating the solar cycle variability originally modeled by Hong and Lindzen.[22] The effects of ion drag on the temperature variation are not simple to interpret, as one must consider modifications in the convergence of the horizontal wind field and how these are manifested in the adiabatic cooling. Finally, addition of mean winds as parameterized in the present model reduces the (2, 2) mode contribution in the thermosphere from roughly 28 K to 13 K, while the equatorial temperature amplitude is reduced from 27 K to 9 K. This large reduction in the equatorial temperature amplitude is mainly due to excitation of the (2, 4) mode in the mesosphere which penetrates into the upper thermosphere and adds vectorially so as to enhance (cancel) the (2, 2) mode contribution at middle (low) latitudes above 200 km.

In a previous study utilizing a simplified binary gas model, Forbes and Hagen[55] demonstrated that the vertical structures of atmospheric tides propagating into the thermosphere were measurably modified by the mutual diffusion between O and N_2 between 100 and 200 km. For instance, at the peak of the (2, 2) mode temperature oscillation that occurred at about 160 km, a reduction in amplitude by about 25 percent was calculated; however, the amplitudes above 220 km were relatively unaffected. Thus, the peak was removed from the vertical structure, resulting in an exponential increase to about 160 km, and rapidly asymptotically approaching a constant value above that height. The shorter-wavelength modes (2, 4) and (2, 5) are affected to a lesser degree since they reach their peak amplitudes at heights (115-125 km) below the level where the O and N_2 concentrations

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Table 2. Semidiurnal Variation of Exospheric Temperature Due to (2, 2) Forcing Below 100 km

Choice of Parameterization	Total equatorial variation				(2, 2) mode contribution			
	SSMIN (T_o = 800 K)		SSMAX (T_o = 1400 K)		SSMIN (T_o = 800 K)		SSMAX (T_o = 1400 K)	
	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase	Amplitude	Phase
K_{oo} $0.0158T^{1/2}/M$, TEMP, IONOS, and HEAT as in Hong and Lindzen[22]; no mean winds.	68.7	6.8	26.2	5.9	69.1	6.9	28.0	6.1
add $K_{oo} = 0.015T^{2/3}/M$ and MSIS TEMP	44.6	7.3	23.9	6.1	45.0	7.5	25.8	6.3
add new IONOS	26.1	7.7	25.5	6.1	26.1	7.7	26.8	6.3
add new HEAT	26.5	7.6	25.4	6.0	27.8	7.8	26.7	6.2
add mean winds below 100 km	9.0	6.6	9.1	5.8	15.0	7.7	14.5	6.2
add mean winds above 100 km	9.2	6.7	7.8	5.8	12.8	8.0	11.9	6.6

become comparable (about 180 km). The effects of O-N_2 diffusion have not been considered in the present set of numerical simulations due to computer limitations. Thus errors on the order of 25 percent in amplitude and 1-2 h in phase can be expected in the tidal fields between 130 and 180 km, associated with upward propagating tides of lower atmosphere origin. However, these errors do not translate into the total semidiurnal variation in this height range and above, due to the relative importance in in-situ excited tidal oscillations which are affected to a lesser degree by O-N_2 diffusion.

7. CONCLUDING REMARKS

The equations and boundary conditions governing tidal oscillations in a viscous, rotating, spherical atmosphere from the surface to 400 km have been formulated and documented, including model parameterizations of background winds, temperature, composition, hydromagnetic coupling, Newtonian cooling, eddy and molecular diffusion, and tidal forcing mechanisms. Excitation of tidal oscillations occurs by absorption of EUV and UV radiation in the thermosphere, H_2O insolation absorption in the troposphere and lower stratosphere, O_3 insolation absorption in the mesosphere, ion-neutral momentum coupling in the F region, and lunar gravitational forcing.

Calculated westerly, northerly, and vertical velocities, and calculated temperature for the solar diurnal tide from the surface to 400 km are presented. Considering the day-to-day variations which are clearly evident in the data, observations of tides by various rocket and radar techniques agree well with the "mean tidal structures" represented by the model. The greatest inconsistencies occur in the 80-100 km height region where the diurnal propagating tide and the in-situ trapped tide are of comparable importance at midlatitudes. Also, it appears that significant differences exist between the various observations in this region. Such discrepancies, which intuitively would seem to be due primarily to the propagating tidal component, can be attributed to a number of factors:

(1) Variations in mesospheric and lower thermospheric turbulence. However, the physics of mutual coupling between the (1, 1) mode and turbulence is uncertain. For instance, turbulence could be generated by unstable "breaking" of the wave (Lindzen[44]), or by a cascade of energy from a stable tidal wave to smaller scale waves which eventually become unstable. Indeed, if eddy diffusion coefficients of order 10^6 cm^2/sec already exist between 80 and 100 km (perhaps due to gravity waves), then mesospheric turbulence might only serve as a passive damping mechanism for the diurnal tide. At any rate, the present study demonstrates the sensitivity of the (1, 1) mode to mesospheric and lower thermospheric turbulence, thus suggesting one possible cause of its variability.

(2) Longitudinal variations in the tides and other atmospheric properties.

(3) Mode "distortion" induced by background mean winds. Although the diurnal propagating tide should be relatively insensitive to mean winds at low latitudes due to the relatively high phase speed of the wave, some observable effects might occur poleward of 20° latitude. For instance, using an analytic method to approximate the propagation of equatorial planetary waves in a shear flow, Lindzen[56] shows than an easterly (westerly) wind of 30 m/sec can decrease (increase) the vertical wavelength of the (1, 1) mode by approximately 3.5 (3.5) km, suggesting corresponding variations in phase in the mesosphere of up to 6 h assuming a tropospheric source for the tide. In addition, changes in meridional scale are estimated to approach ±8 percent, which can be important at nodal crossings or extrema of tidal structures. Due to the slow convergence of the diurnal expansion functions, such features would probably be better described in terms of a "distorted" (1, 1) mode rather than in terms of (1, 2), (1, 3), and other possible modes (Lindzen[56]). Although the distorting effects of mean winds and meridional temperature gradients are very likely less than the upper limit estimates given above, further theoretical and observational research aimed at this problem are warranted. In the current model, these effects have been neglected due to the convergence difficulties in the spherical viscid model for the short-scale diurnal tides.

(4) Comparisons of data sets taken during non-overlapping time periods.

Some insight into possible variations induced in the total diurnal tidal structures in the mesosphere and lower thermosphere due to a 6-hour phase shift in the (1, 1) component are illustrated in Figure 18. At midlatitudes between 80 and 100 km the (1, -2) and (1, 1) modes can add vectorially to produce a variety of amplitude structures, strikingly similar to the partial reflection observations reported by Vincent and Stubbs[57] over the same height region at Adelaide (35° S) for a 7-day period during June 1973. Similar variations in structure can occur between 120 and 180 km over Arecibo, where the (1, 1) and in-situ excited components are comparable.

A much better understanding of the physics and morphology of the diurnal tide in the mesosphere and lower thermosphere, specifically items (1)-(4) above, requires coordinated simultaneous observational campaigns involving the various radar techniques for probing this region of the atmosphere. In fact, the IAGA/URSI Cooperative Tidal Observation Program (CTOP) has already been

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57. Vincent, R.A., and Stubbs, T.J. (1977) A study of motions in the winter mesosphere using the partial reflection drift technique, Planet. Space Sci. 25:441-455.

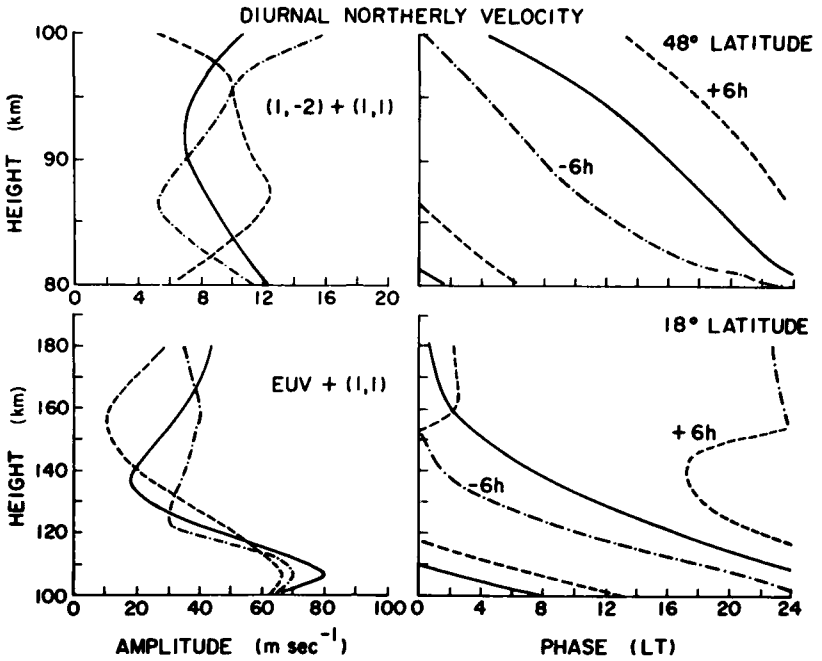

Figure 18. Calculated Total Diurnal Northerly Velocities at 48° Latitude Between 80 and 100 km, and at 18° Latitude Between 100 and 180 km, With the Phase of the (1, 1) Propagating Mode Shifted by +6 Hours and -6 Hours to Illustrate Possible Effects of the Variability of This Mode

implemented, and results for two CTOP periods have been summarized by Roper and Salah.[58] Hopefully these and other coordinated efforts during the forthcoming 1982-1985 Middle Atmosphere Program (MAP) period will offer answers to some of these questions.

Solar and lunar semidiurnal wind and temperature oscillations from the surface to 400 km have also been simulated for average solar activity conditions utilizing the numerical tidal model. Explicit vertical structures of westerly, northerly, and vertical winds and of temperature are presented at 0, 18, 42, and 60° latitude for equinox and solstice conditions in Appendix A, along with tabulations for every 6° latitude in Appendix B. In this report the penetration of semidiurnal tides of lower atmosphere origin into the thermosphere is examined in detail. The calculated results are interpreted in part by Hough mode decomposition of the numerical simulations. Amplitudes of the (2, 4) and (2, 5) modes above

58. Roper, R.G., and Salah, J.E. (1978) Preliminary results from the URSI/IAGA cooperative tidal observations program (CTOP), J. Atmos. Terr. Phys. 40:879-885.

100 km are found to be significantly affected by mesospheric eddy diffusion coefficients in excess of 2×10^6 cm^2/sec. The total solar semidiurnal exospheric temperature oscillation for average solar conditions ranges from about 10-20 K poleward of 40° N to about 40-60 K equatorward at 30° N, and has its origin in three sources of excitation, all of comparable importance: (1) EUV solar radiation absorption in the lower thermosphere (100-200 km); (2) in-situ momentum coupling due to the interaction of diurnal winds and diurnally-varying ion drag; and (3) tides propagating upwards from below 100 km. The effects of O-N_2 diffusion, which have been omitted due to computer limitations, are not expected to appreciably modify these results except perhaps in the 120-160 km region where errors of order 25 percent in amplitude and 1-2 h in phase might apply. In addition, lunar temperature and wind amplitudes are sufficiently large relative to the solar component (up to 20 percent in the lower and upper thermosphere) to account for some of the observed variability previously attributed to the solar tide.

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Appendix A

Graphs Showing Vertical Structures of Atmospheric Tidal Components

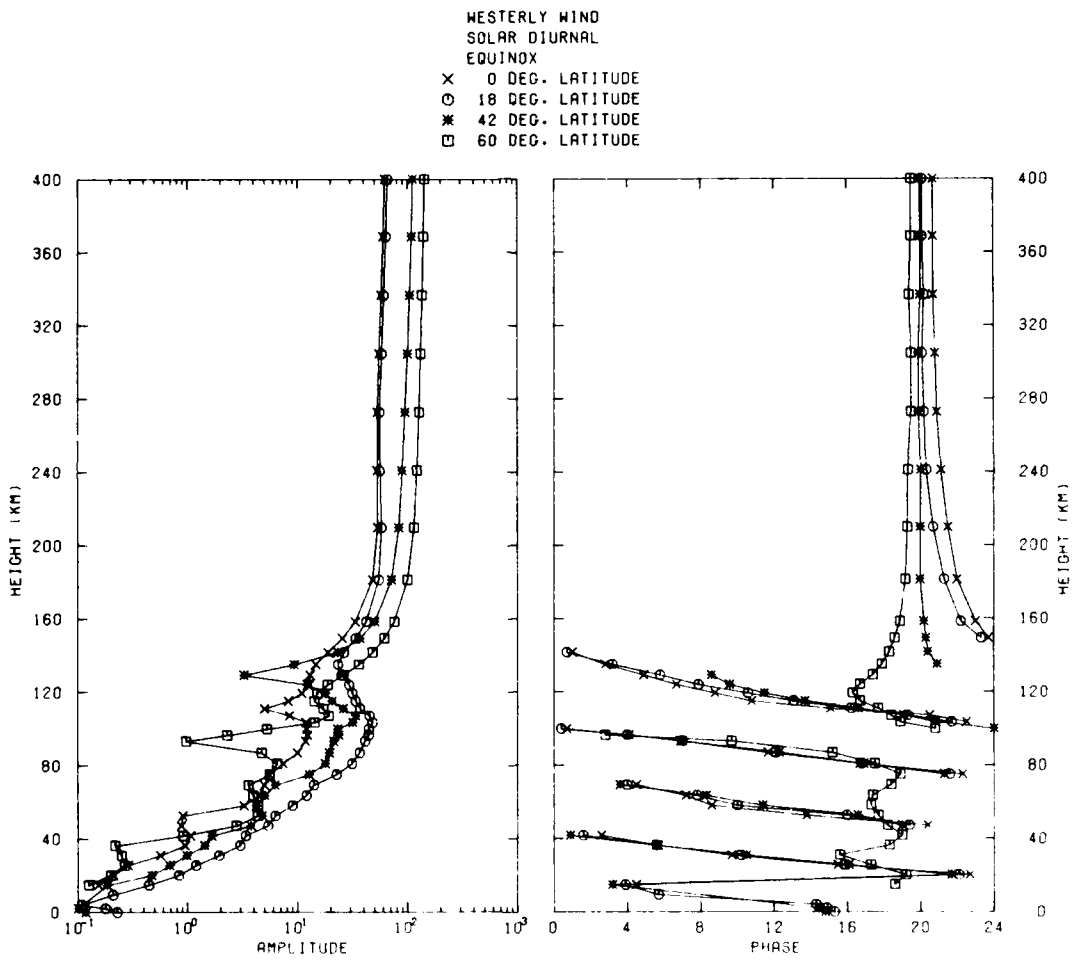

Figure A1. Solar Diurnal Component at Equinox of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

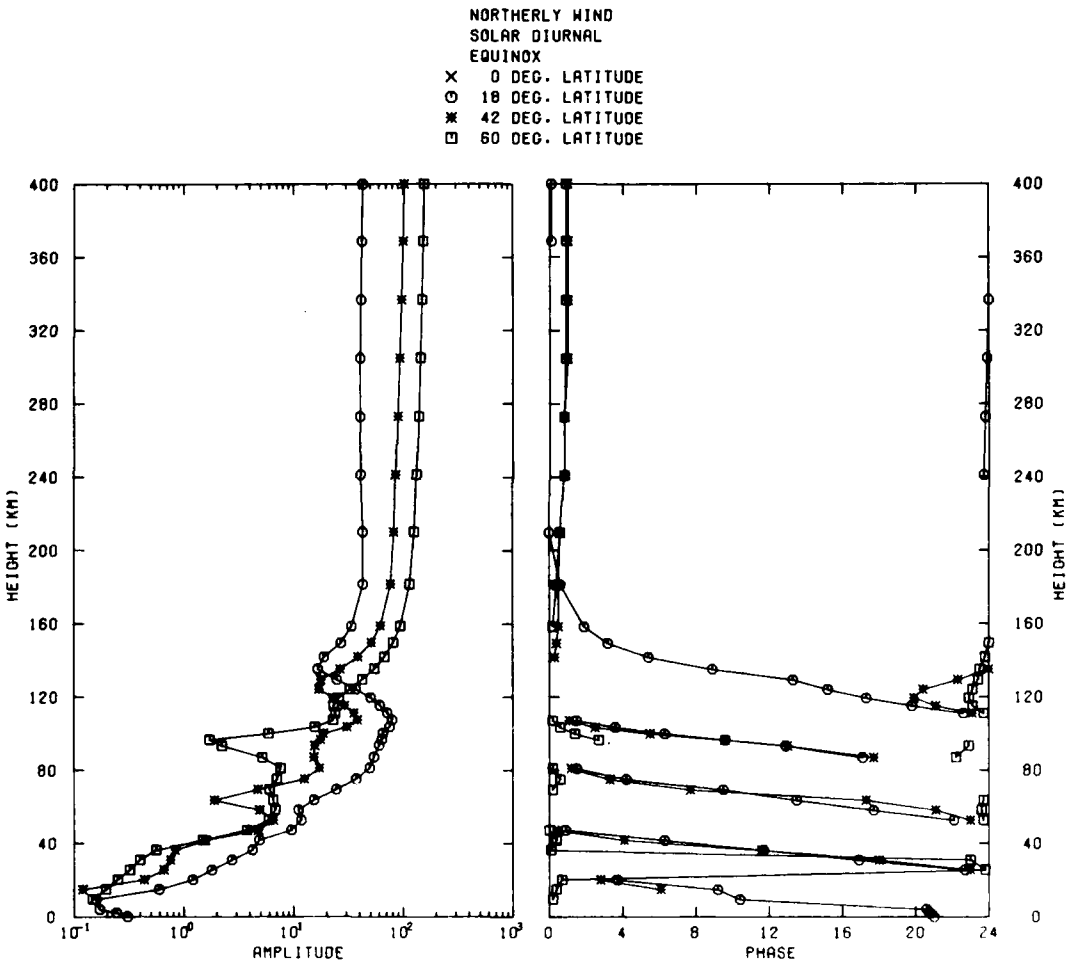

Figure A2. Solar Diurnal Component at Equinox of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

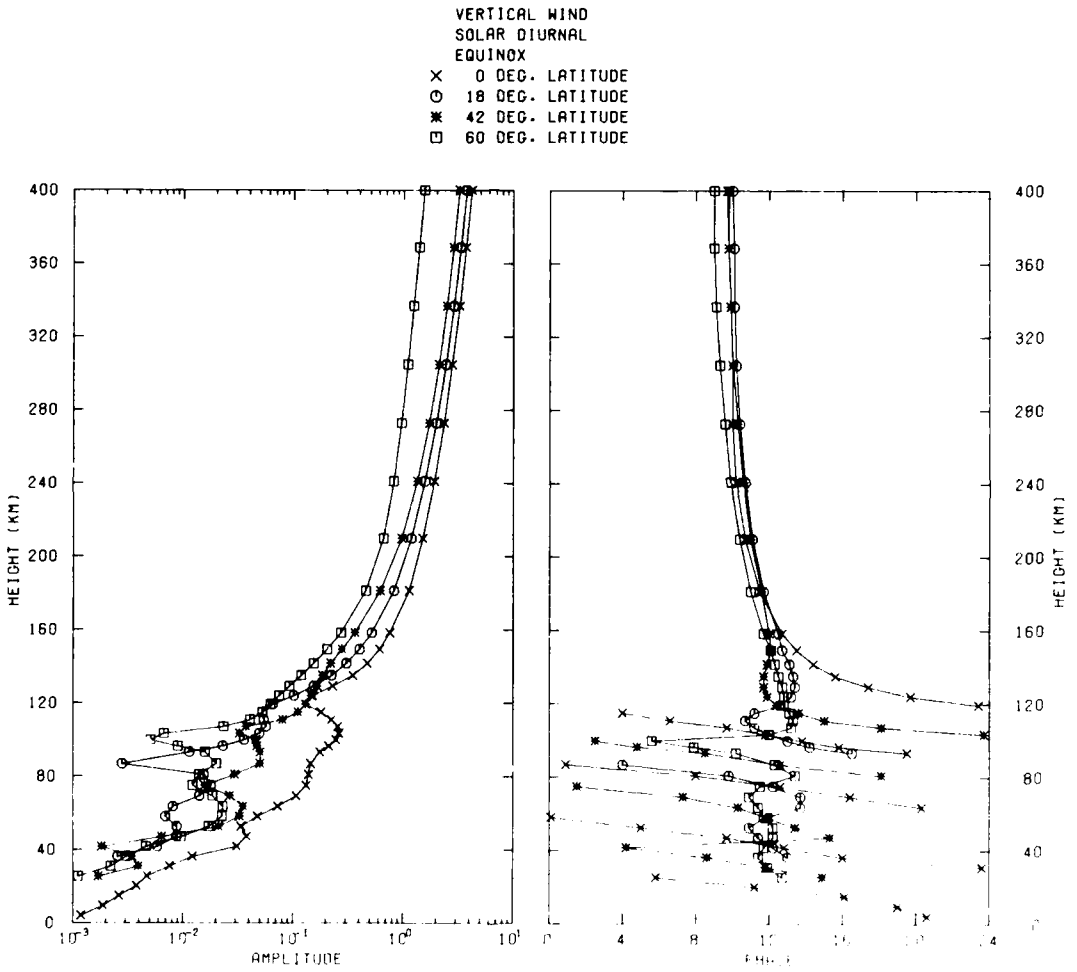

Figure A3. Solar Diurnal Component at Equinox of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

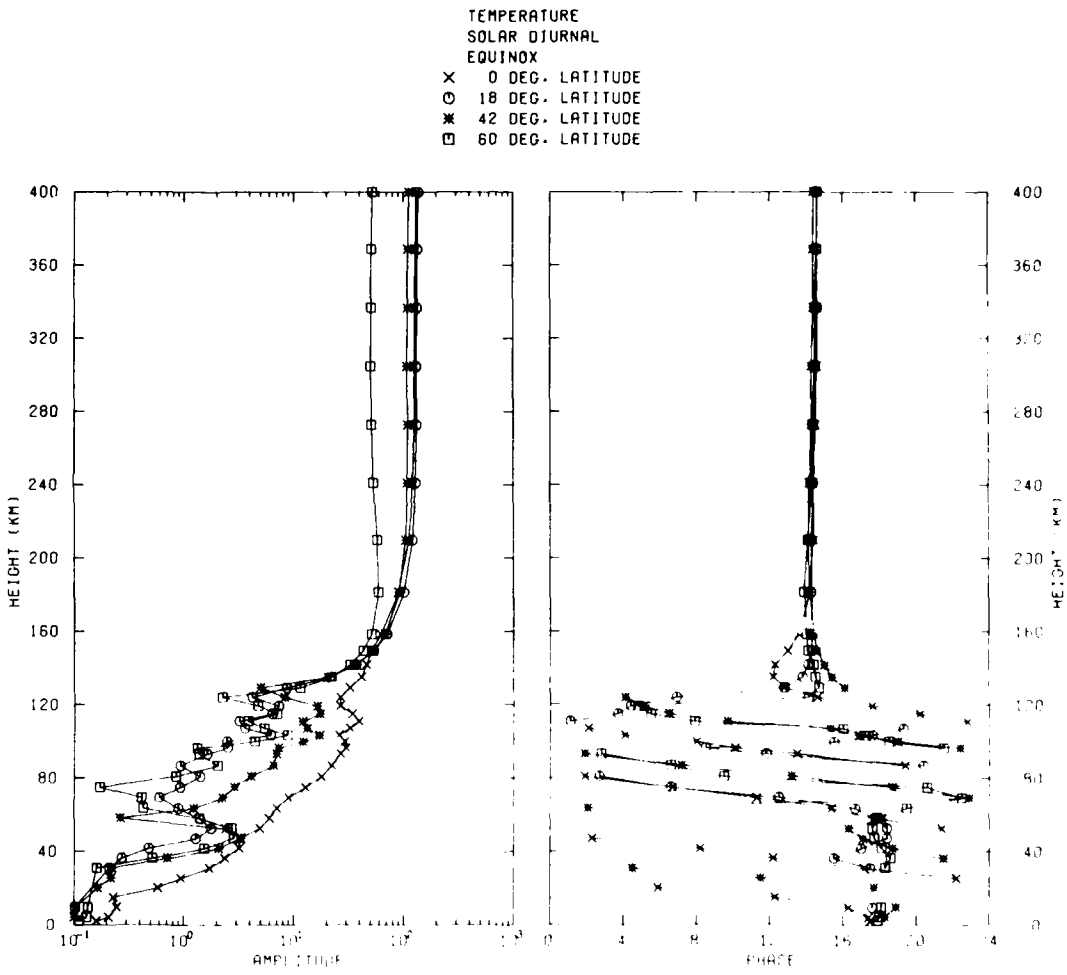

Figure A4. Solar Diurnal Component at Equinox of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

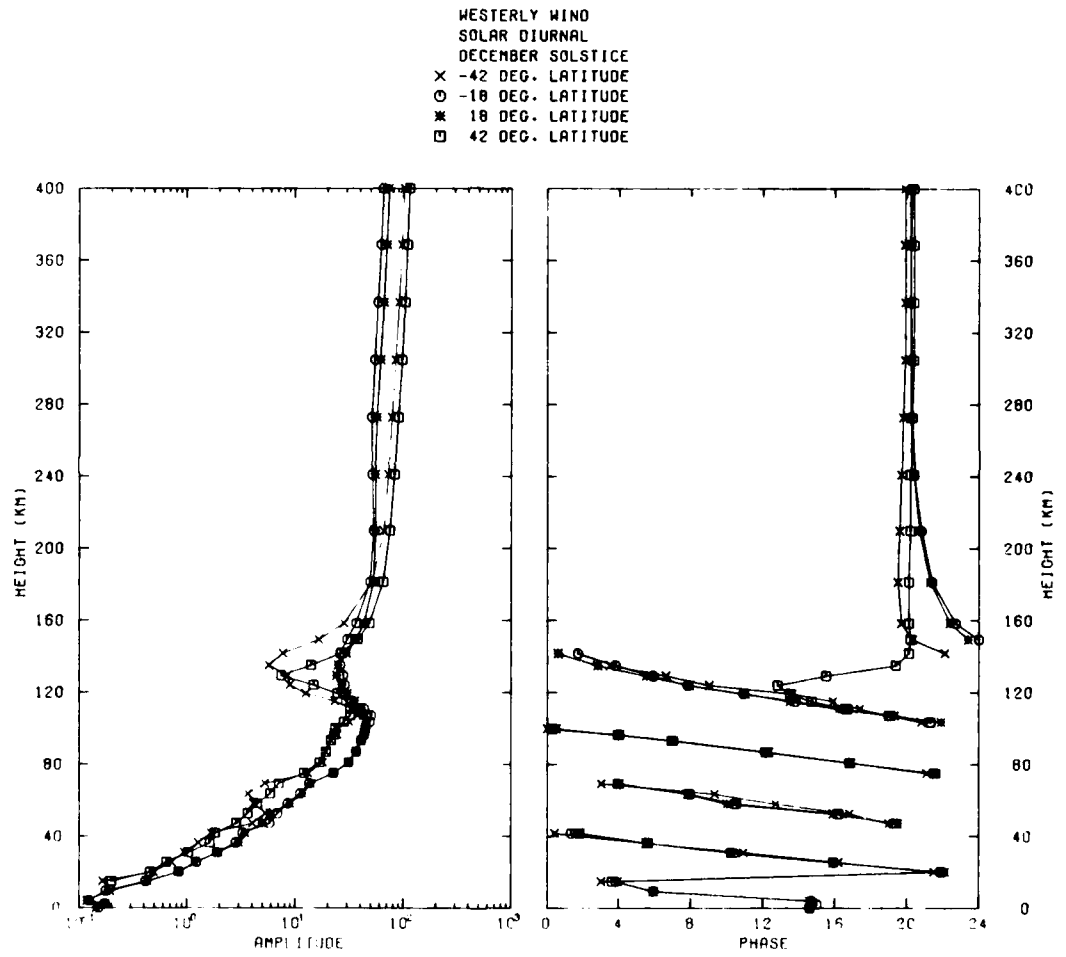

Figure A5. Solar Diurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

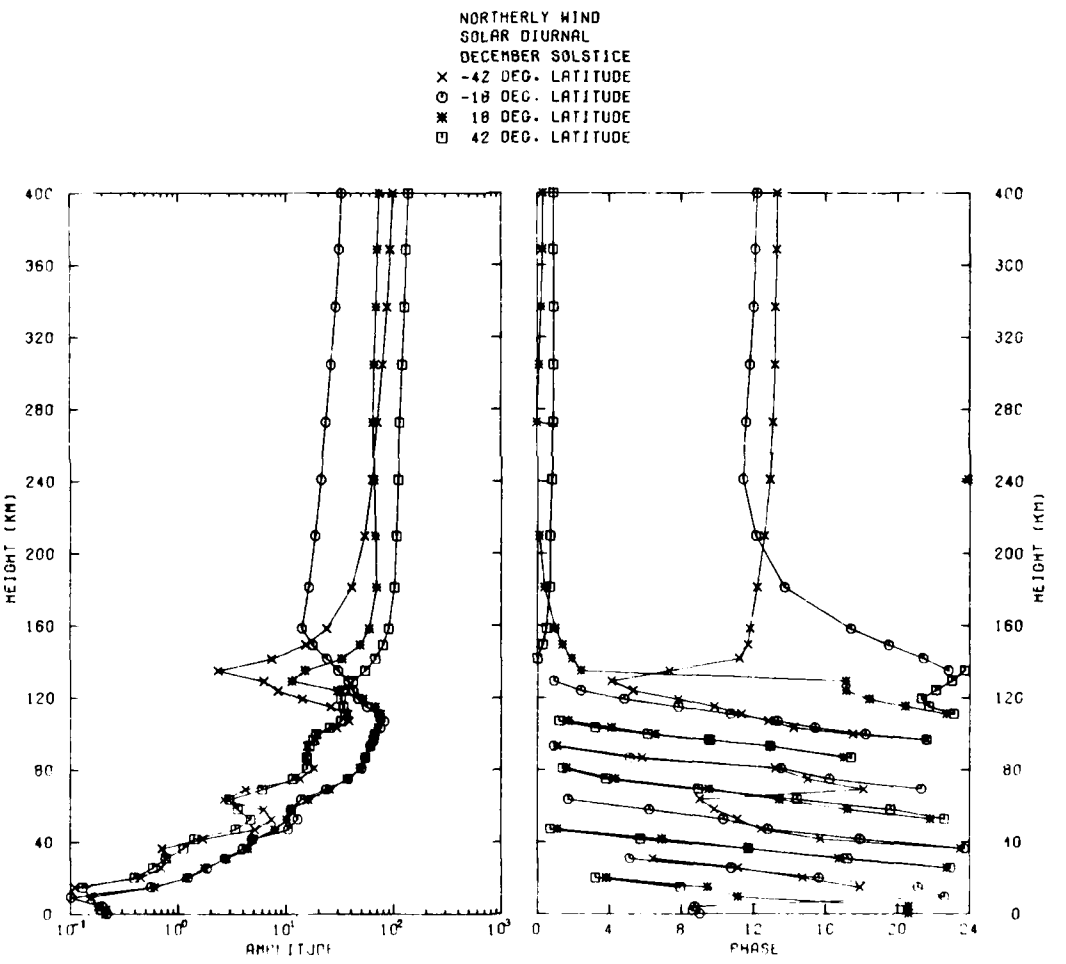

Figure A6. Solar Diurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

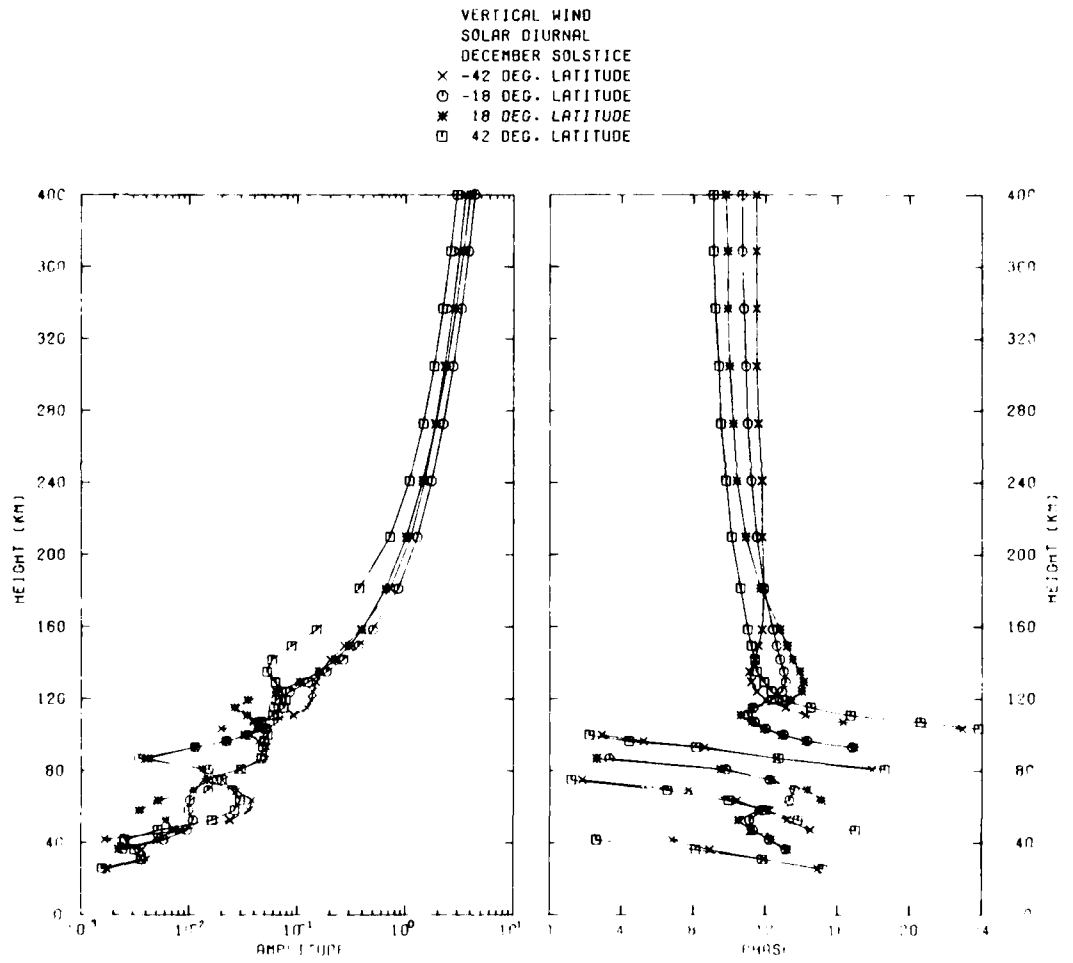

Figure A7. Solar Diurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

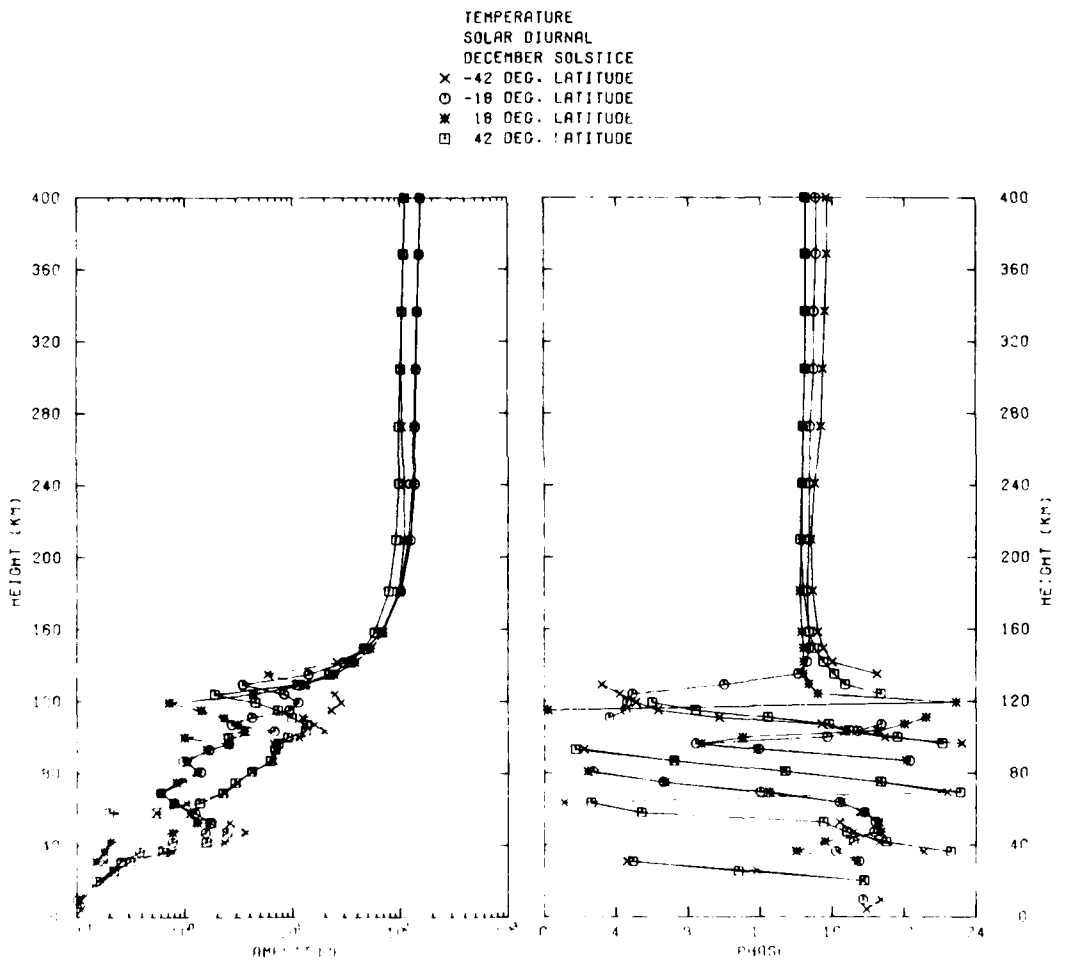

Figure A8. Solar Diurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

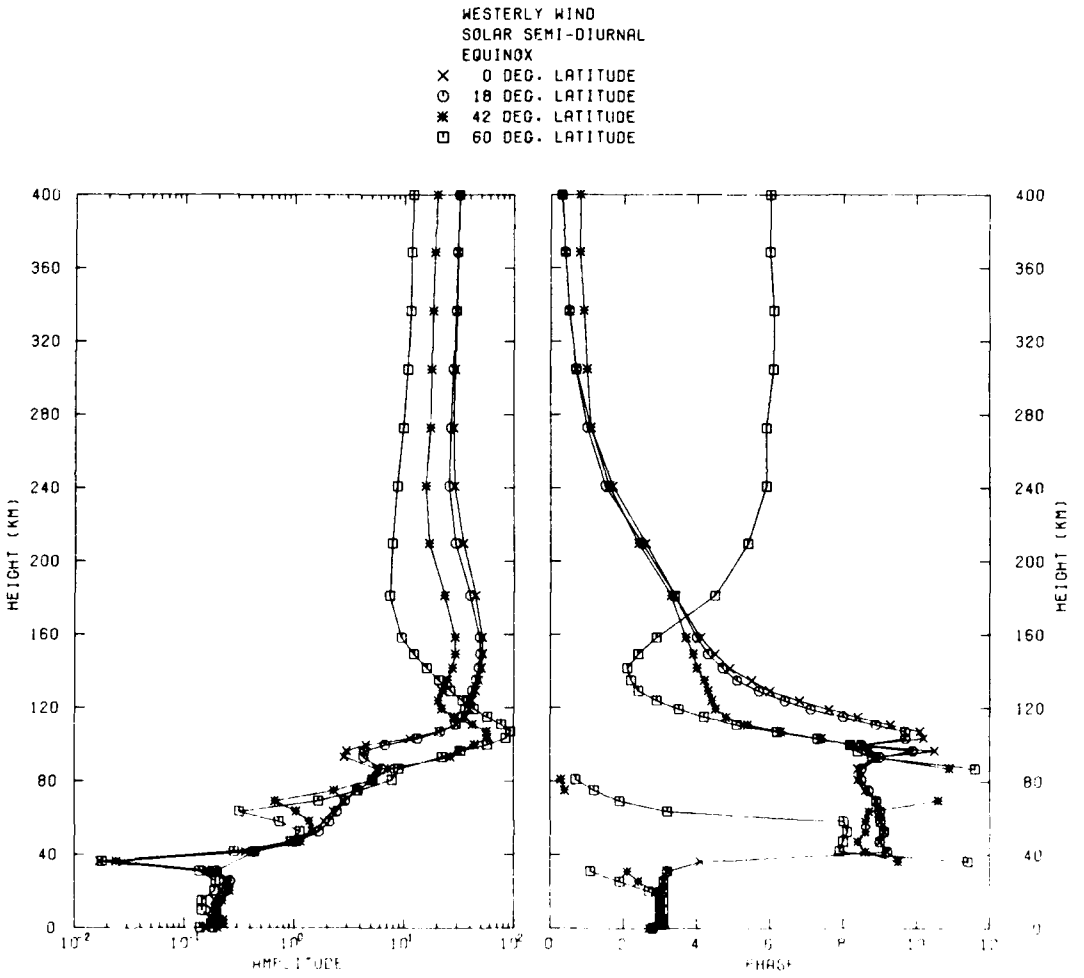

Figure A9. Solar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

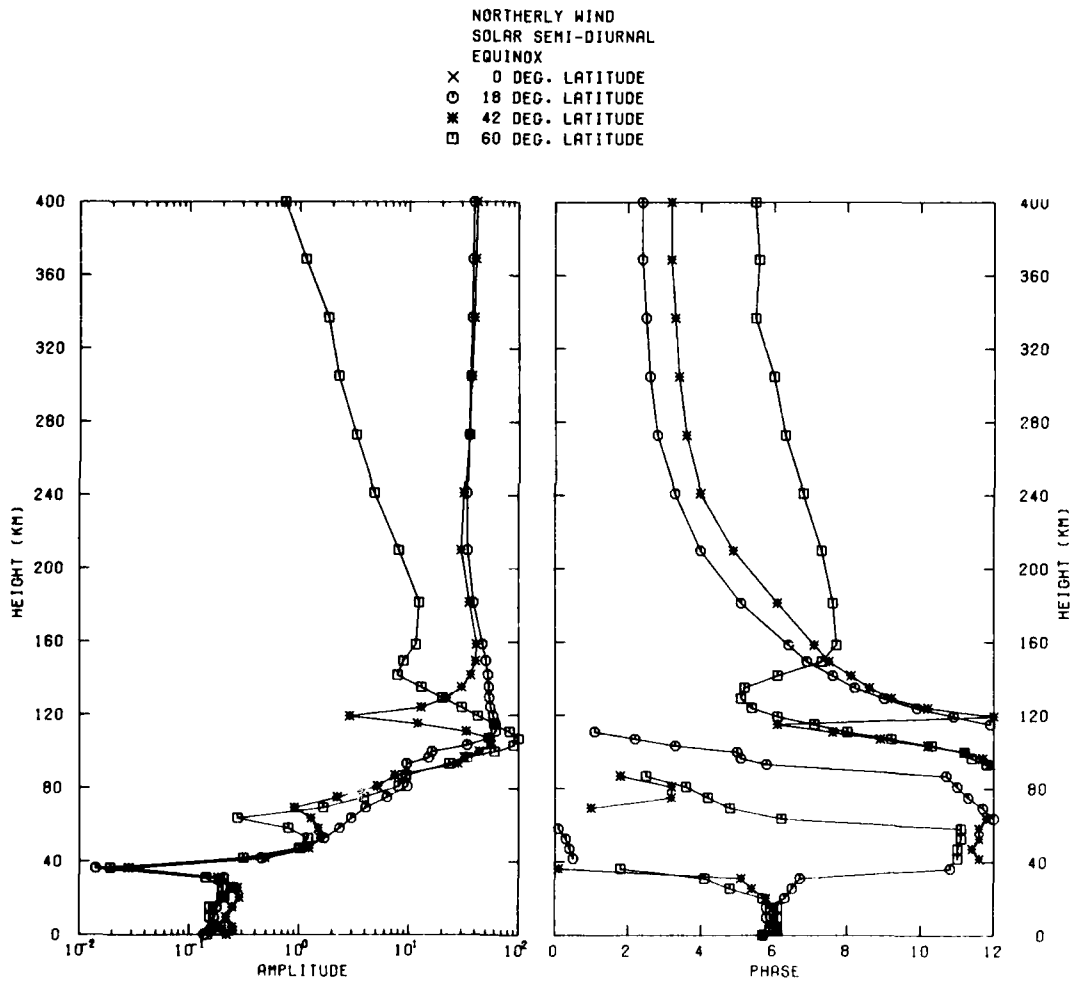

Figure A10. Solar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

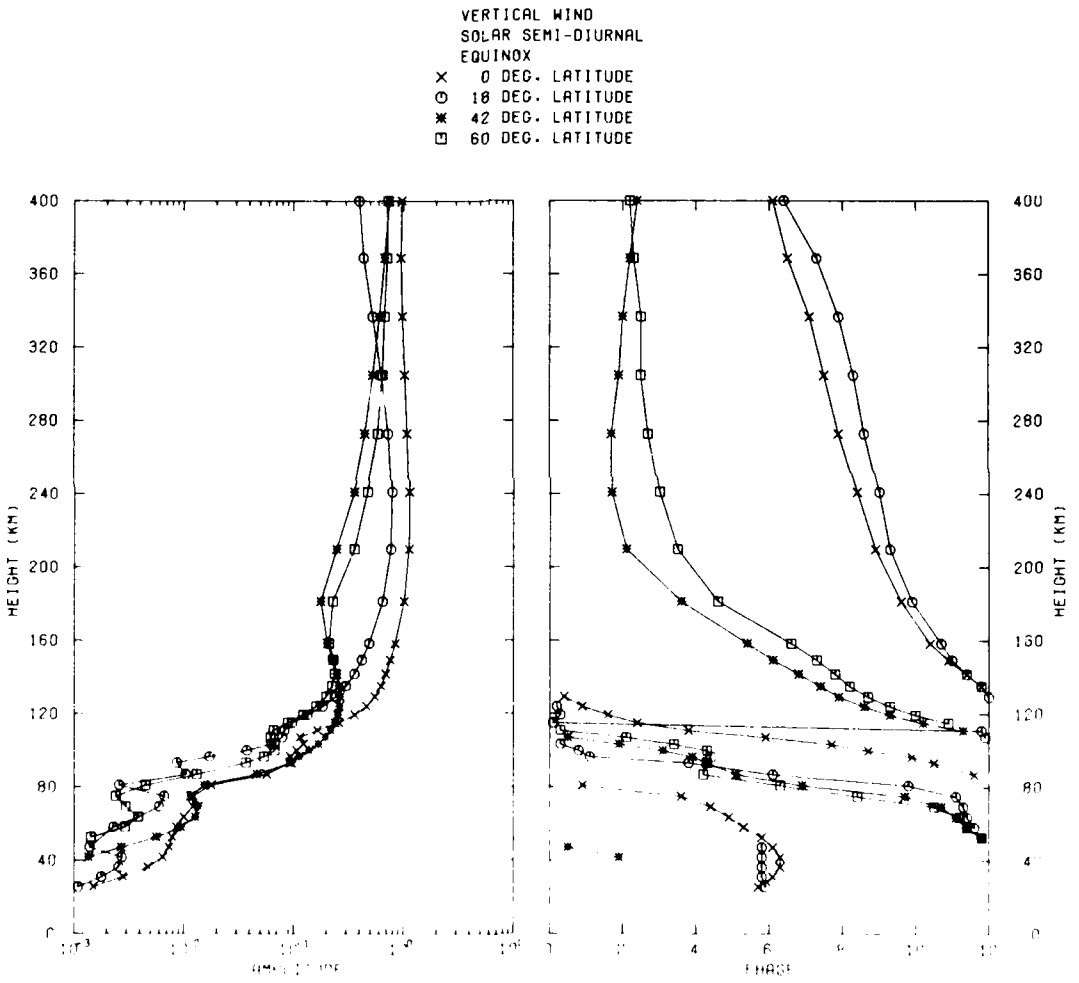

Figure A11. Solar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

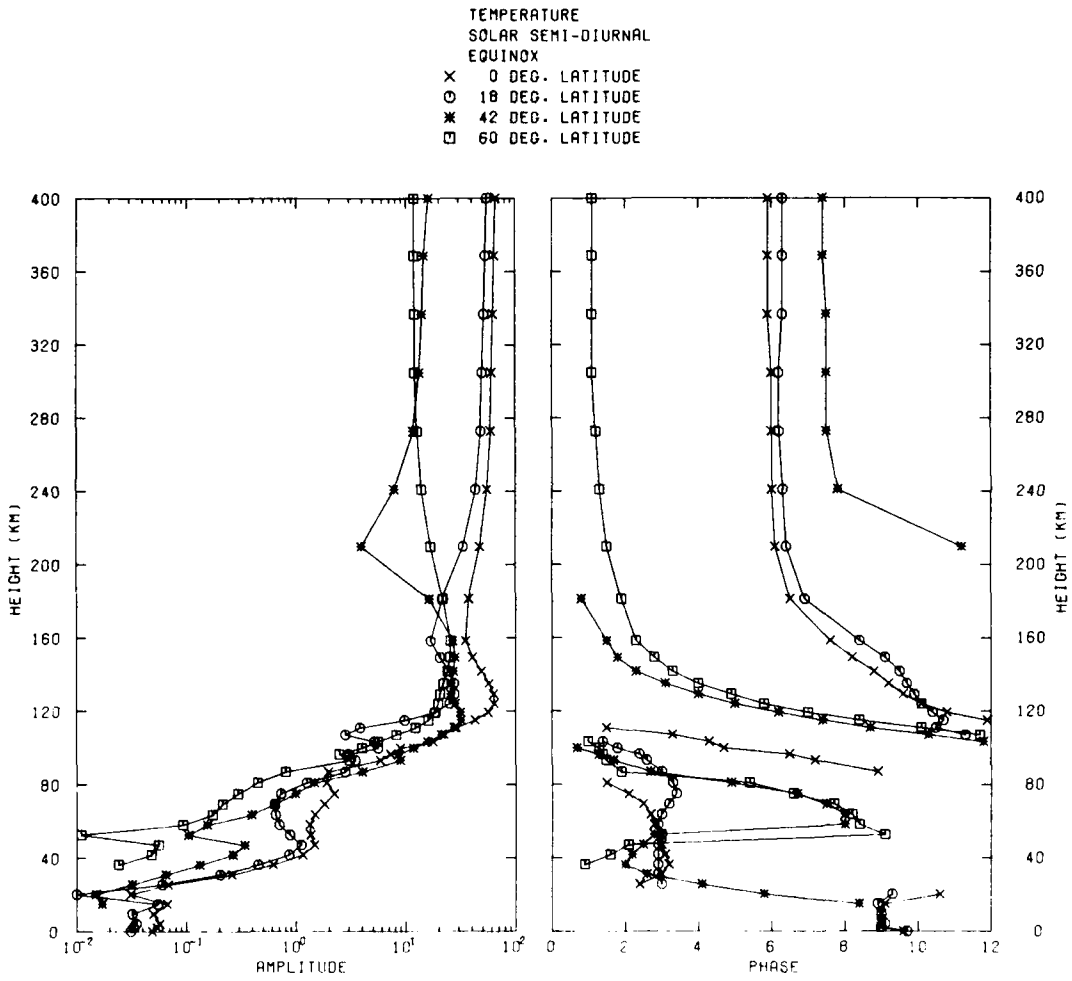

Figure A12. Solar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

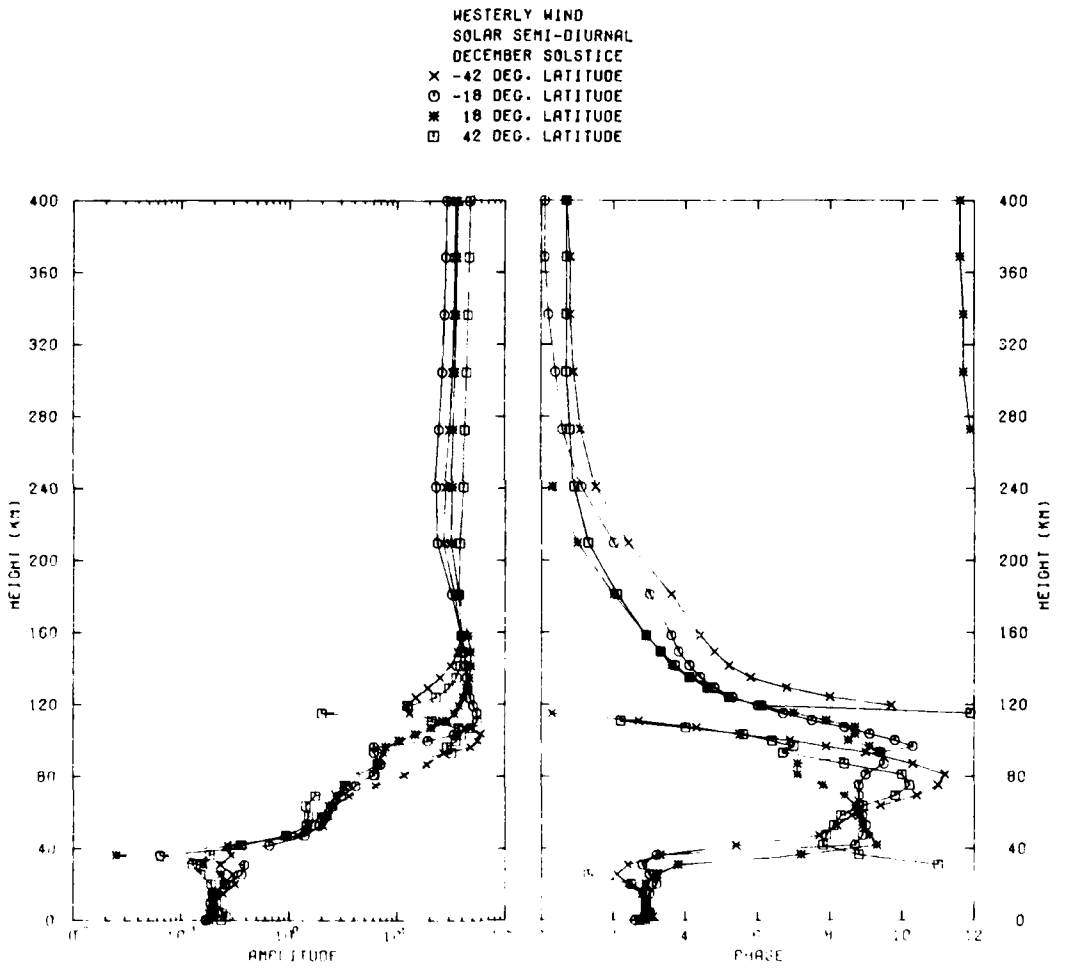

Figure A13. Solar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

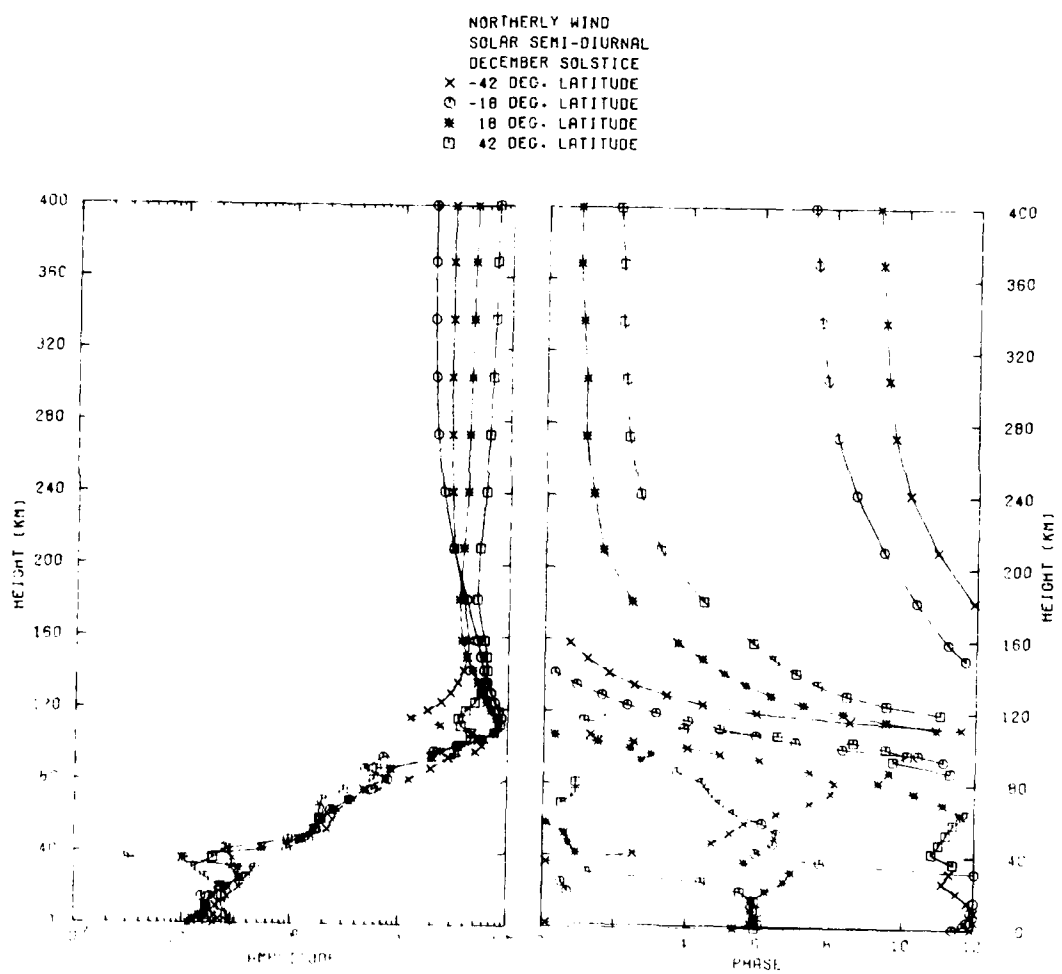

Figure A14. Solar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

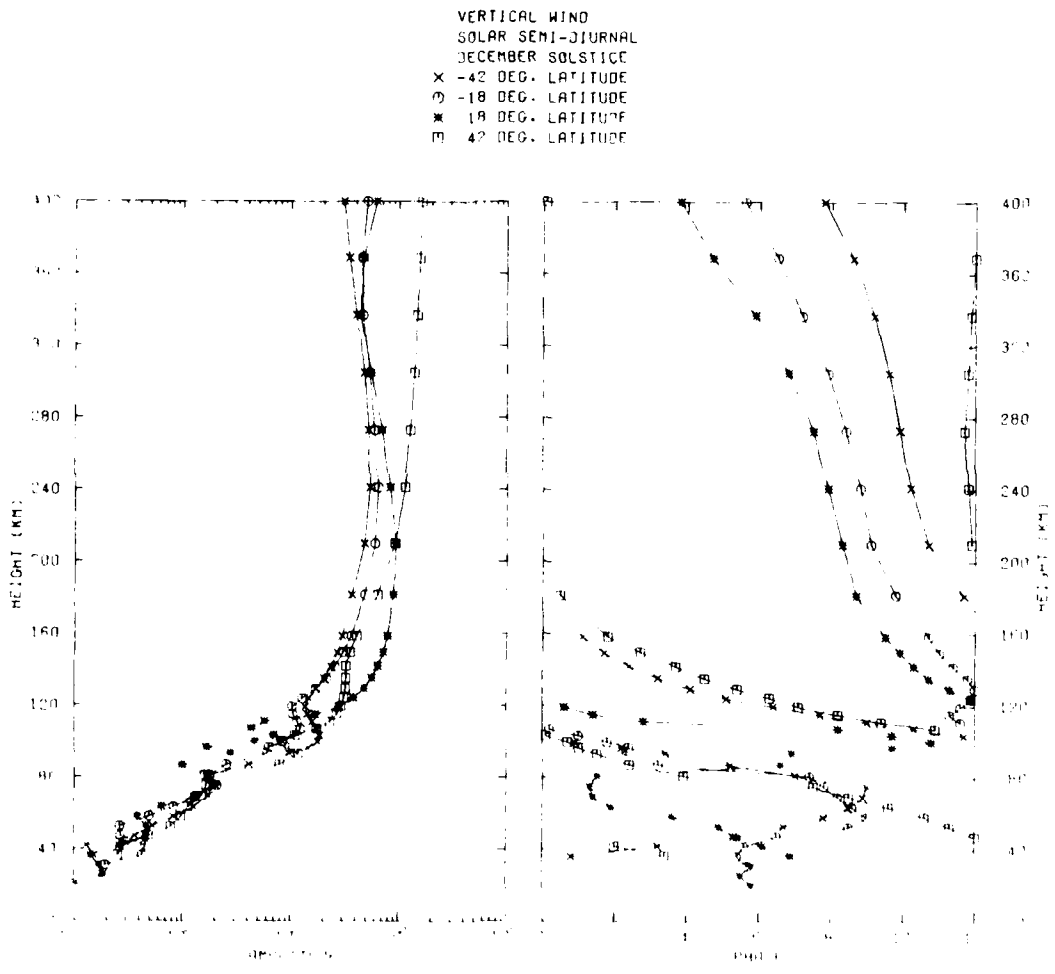

Figure A15. Solar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

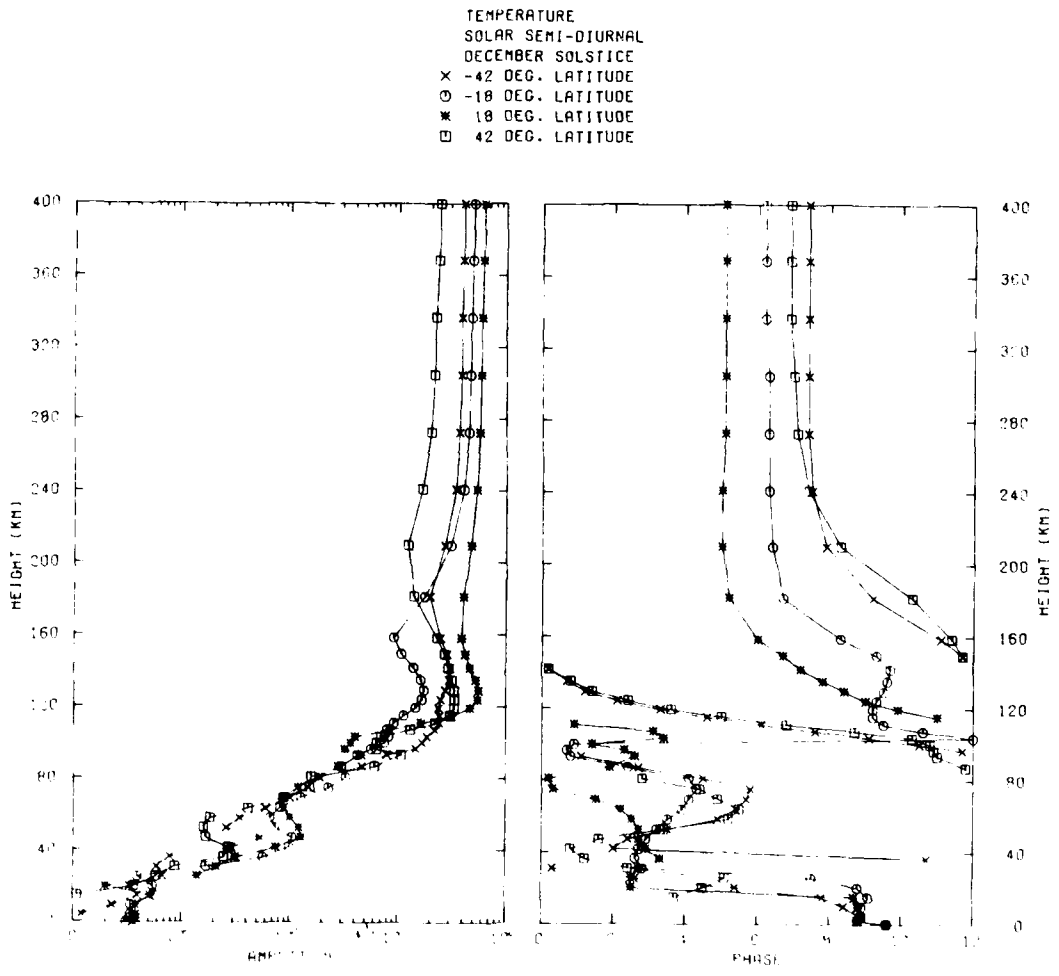

Figure A16. Solar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

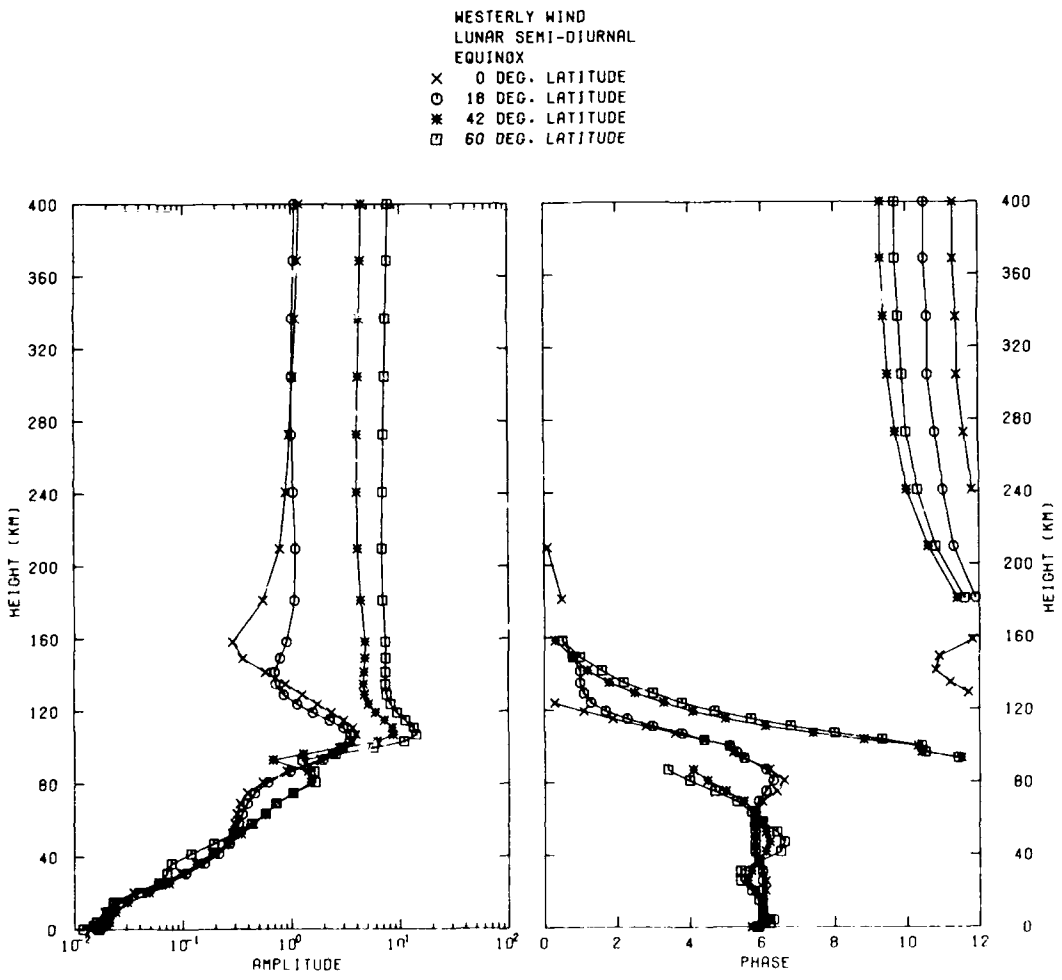

Figure A17. Lunar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

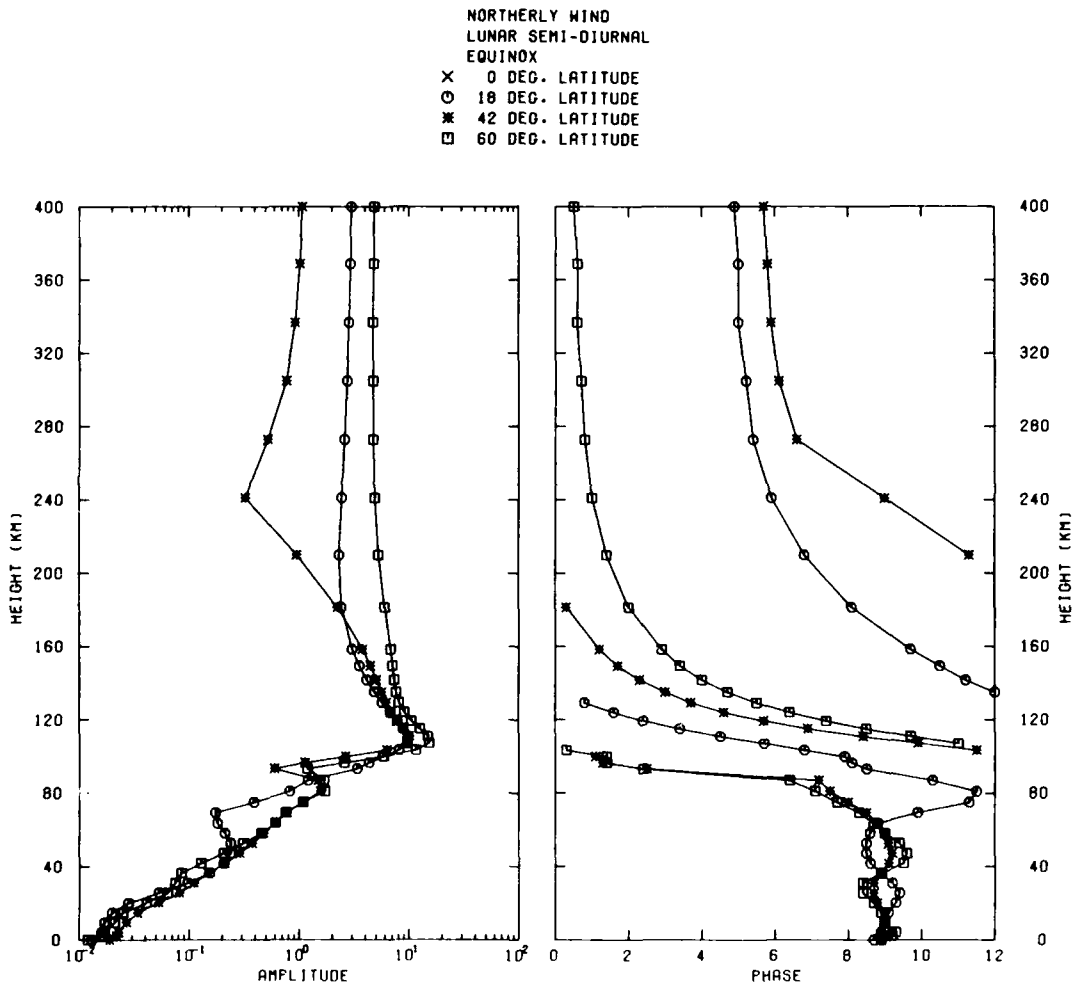

Figure A18. Lunar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

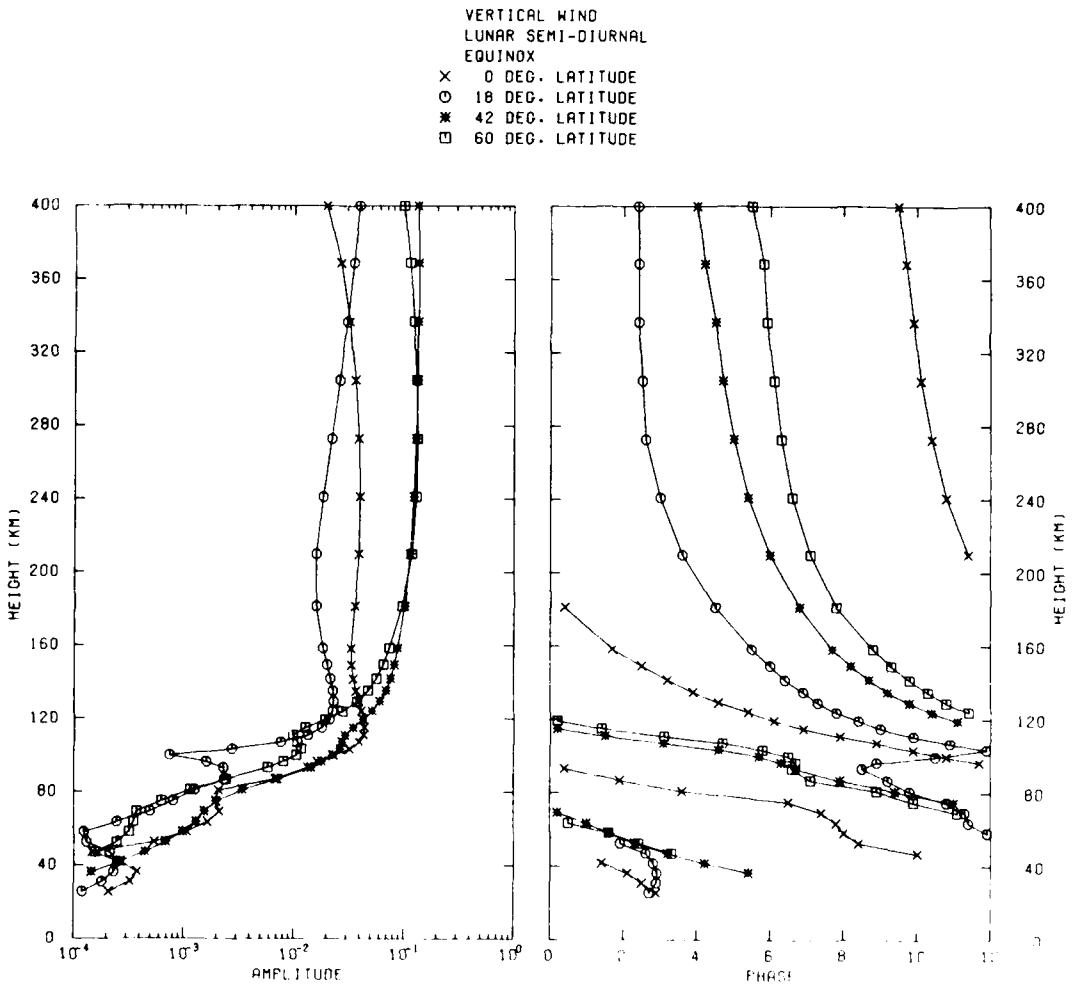

Figure A19. Lunar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

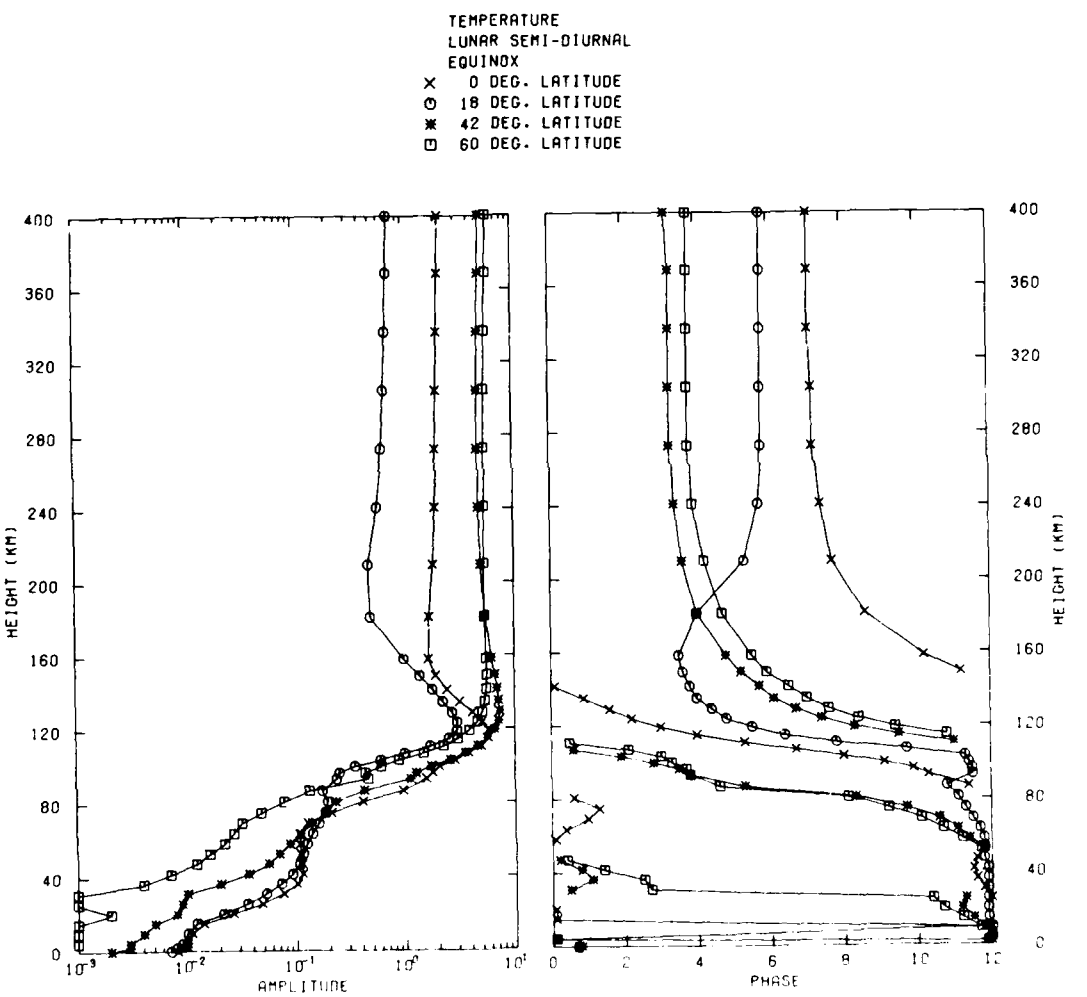

Figure A20. Lunar Semidiurnal Component at Equinox of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

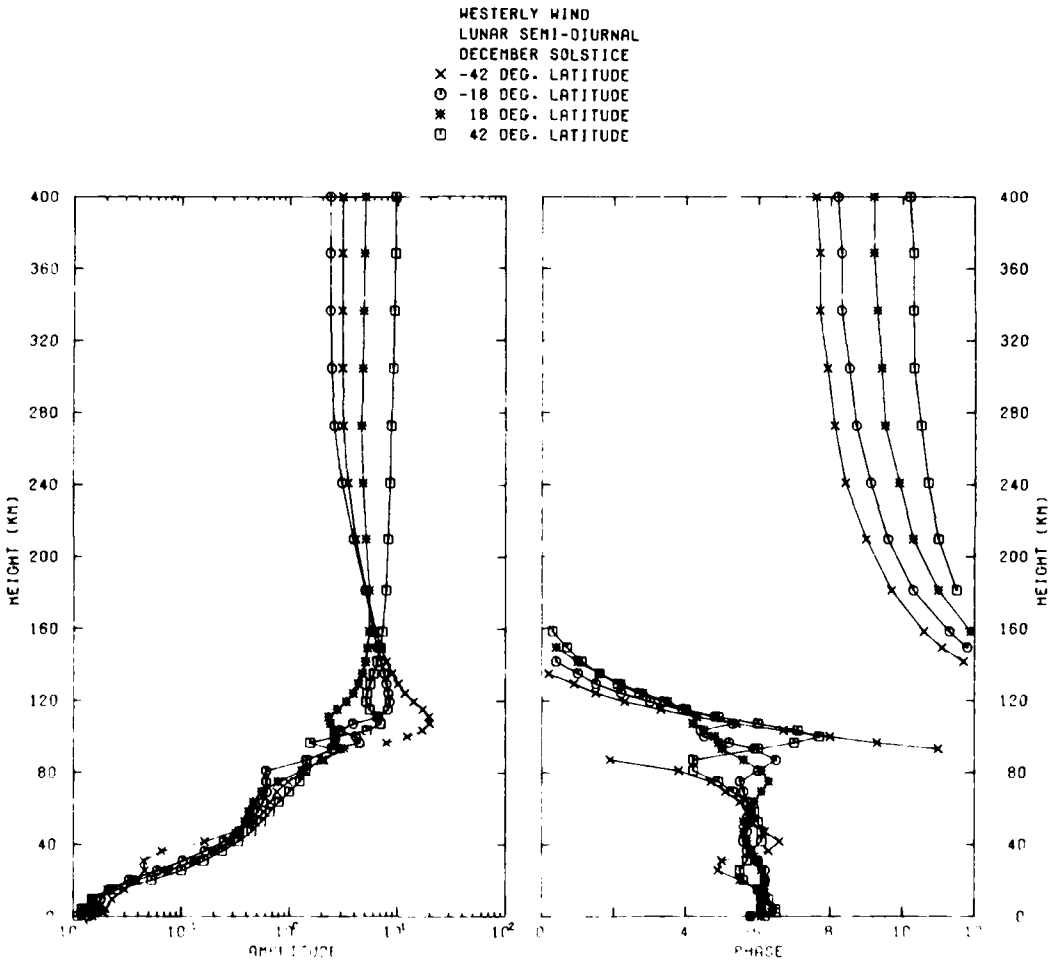

Figure A21. Lunar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Westerly Winds vs Altitude

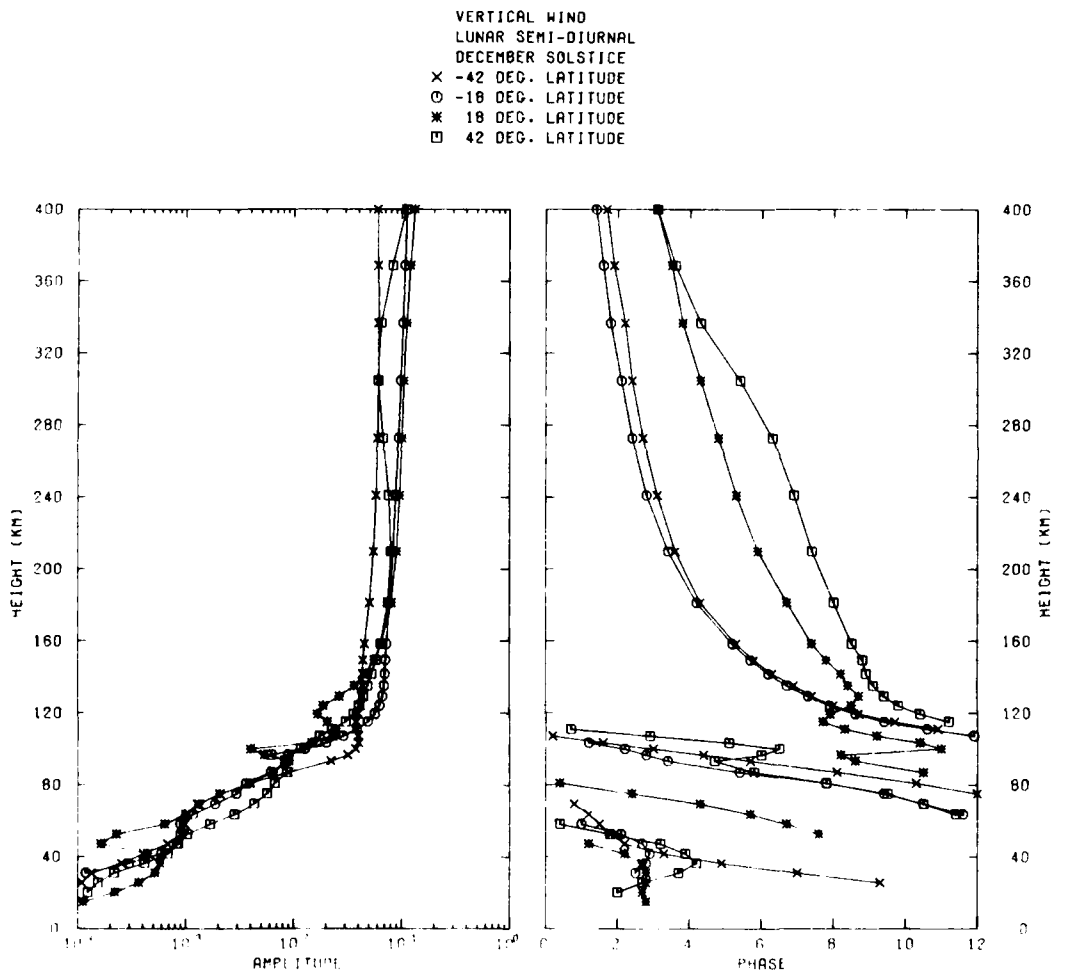

Figure A22. Lunar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Northerly Winds vs Altitude

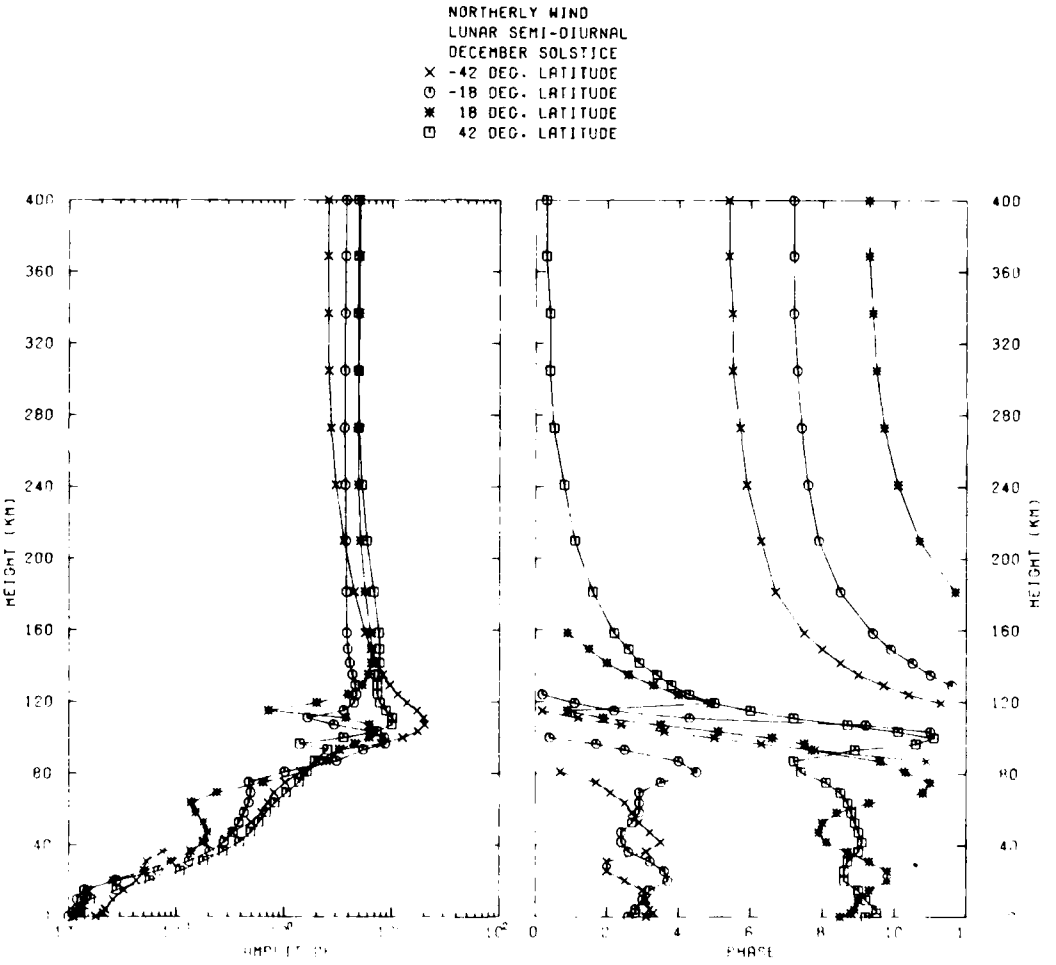

Figure A23. Lunar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Vertical Winds vs Altitude

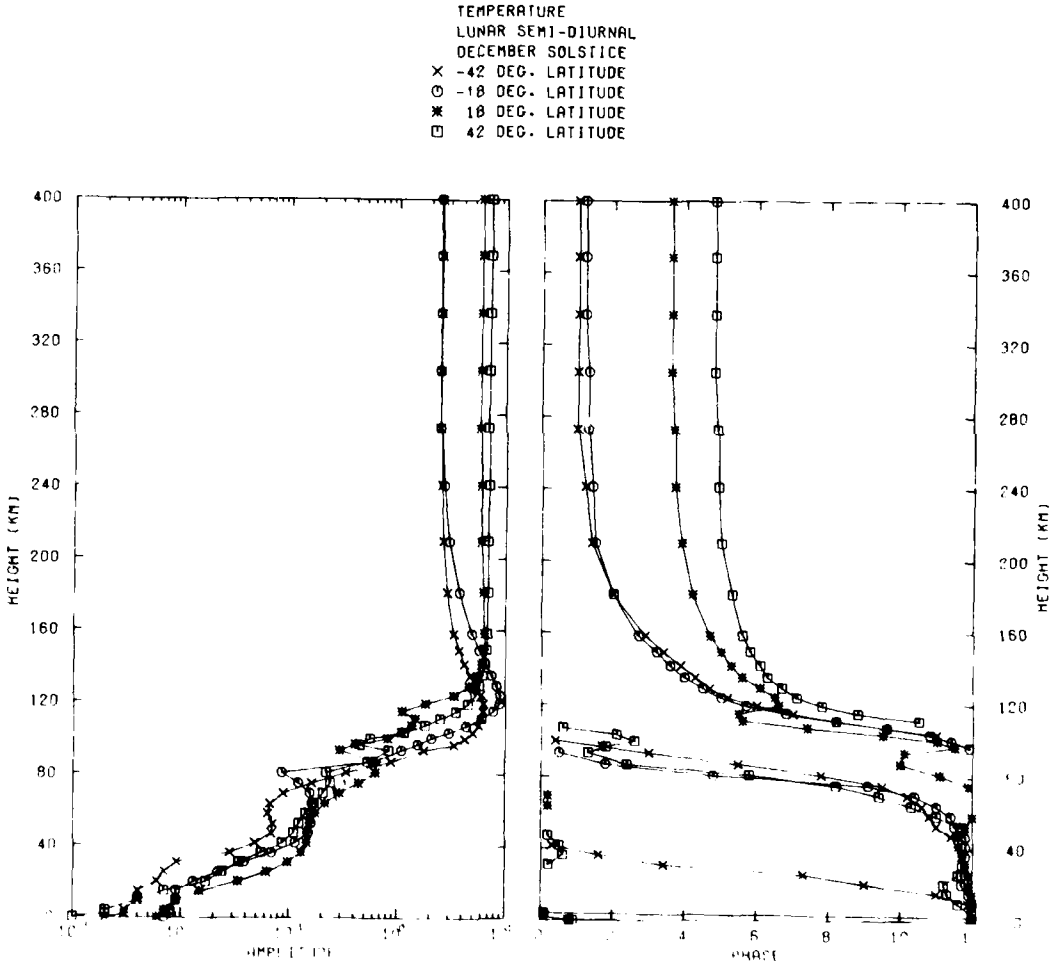

Figure A24. Lunar Semidiurnal Component at December Solstice of the Amplitude (left) and Phase (right) of Temperature Oscillations vs Altitude

Appendix B

Tables of Solar Diurnal, Solar Semidiurnal, and Lunar Semidiurnal Components

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes

Z=	0.000	KM									
LAT=	0.0	U=	.059 / 15.9	V=	0.000 / 12.0	W=	.000510 / 21.3	T=	.099 / 18.8
LAT=	6.0	U=	.090 / 15.7	V=	.158 / 21.1	W=	.000433 / 21.3	T=	.092 / 18.9
LAT=	12.0	U=	.159 / 15.4	V=	.267 / 21.0	W=	.000244 / 21.3	T=	.072 / 19.3
LAT=	18.0	U=	.229 / 15.3	V=	.305 / 21.0	W=	.000034 / 21.3	T=	.053 / 20.3
LAT=	24.0	U=	.258 / 15.2	V=	.272 / 20.9	W=	.000117 / 9.4	T=	.046 / 21.2
LAT=	30.0	U=	.238 / 15.1	V=	.209 / 20.8	W=	.000176 / 9.4	T=	.048 / 21.6
LAT=	36.0	U=	.188 / 15.0	V=	.134 / 20.4	W=	.000167 / 9.4	T=	.056 / 21.5
LAT=	42.0	U=	.118 / 14.8	V=	.070 / 19.3	W=	.000127 / 9.4	T=	.065 / 21.0
LAT=	48.0	U=	.060 / 14.0	V=	.040 / 16.5	W=	.000080 / 9.4	T=	.072 / 20.8
LAT=	54.0	U=	.026 / 10.9	V=	.045 / 13.7	W=	.000043 / 9.4	T=	.077 / 20.6
LAT=	60.0	U=	.036 / 7.1	V=	.056 / 12.8	W=	.000023 / 9.4	T=	.077 / 20.5
LAT=	66.0	U=	.050 / 6.7	V=	.062 / 12.8	W=	.000011 / 9.4	T=	.071 / 20.4
LAT=	72.0	U=	.057 / 7.4	V=	.062 / 13.2	W=	.000005 / 9.4	T=	.059 / 20.4
LAT=	78.0	U=	.063 / 8.6	V=	.063 / 14.0	W=	.000002 / 9.4	T=	.044 / 20.3
Z=	2.078	KM									
LAT=	0.0	U=	.054 / 15.2	V=	0.000 / 12.0	W=	.000669 / 21.0	T=	.160 / 17.5
LAT=	6.0	U=	.077 / 15.1	V=	.127 / 20.9	W=	.000566 / 20.9	T=	.146 / 17.6
LAT=	12.0	U=	.128 / 15.0	V=	.212 / 20.8	W=	.000318 / 20.7	T=	.114 / 17.6
LAT=	18.0	U=	.178 / 14.9	V=	.243 / 20.8	W=	.000060 / 17.0	T=	.080 / 17.8
LAT=	24.0	U=	.198 / 14.9	V=	.219 / 20.8	W=	.000199 / 10.4	T=	.059 / 18.1
LAT=	30.0	U=	.184 / 14.8	V=	.169 / 20.7	W=	.000294 / 10.1	T=	.057 / 18.2
LAT=	36.0	U=	.150 / 14.7	V=	.110 / 20.4	W=	.000300 / 10.2	T=	.069 / 18.2
LAT=	42.0	U=	.101 / 14.4	V=	.060 / 19.6	W=	.000257 / 10.4	T=	.088 / 18.1
LAT=	48.0	U=	.060 / 13.7	V=	.031 / 17.4	W=	.000200 / 10.8	T=	.103 / 18.0
LAT=	54.0	U=	.033 / 11.9	V=	.031 / 14.1	W=	.000150 / 11.3	T=	.111 / 18.0
LAT=	60.0	U=	.031 / 8.9	V=	.040 / 12.9	W=	.000117 / 12.0	T=	.111 / 17.9
LAT=	66.0	U=	.042 / 7.4	V=	.049 / 12.6	W=	.000093 / 12.8	T=	.103 / 17.8
LAT=	72.0	U=	.053 / 6.9	V=	.056 / 12.6	W=	.000078 / 14.0	T=	.086 / 17.8
LAT=	78.0	U=	.062 / 6.7	V=	.062 / 12.6	W=	.000070 / 15.5	T=	.063 / 17.7
Z=	4.161	KM									
LAT=	0.0	U=	.034 / 13.8	V=	0.000 / 12.0	W=	.001189 / 20.6	T=	.207 / 17.4
LAT=	6.0	U=	.048 / 14.0	V=	.088 / 20.5	W=	.001001 / 20.5	T=	.189 / 17.4
LAT=	12.0	U=	.081 / 14.2	V=	.149 / 20.6	W=	.000552 / 20.2	T=	.144 / 17.5
LAT=	18.0	U=	.109 / 14.3	V=	.170 / 20.6	W=	.000109 / 15.8	T=	.096 / 17.9
LAT=	24.0	U=	.118 / 14.3	V=	.153 / 20.7	W=	.000383 / 10.1	T=	.067 / 18.3
LAT=	30.0	U=	.106 / 14.3	V=	.120 / 20.8	W=	.000548 / 9.8	T=	.064 / 18.5
LAT=	36.0	U=	.084 / 14.4	V=	.086 / 21.1	W=	.000552 / 9.9	T=	.078 / 18.5
LAT=	42.0	U=	.058 / 14.6	V=	.059 / 21.7	W=	.000478 / 10.1	T=	.100 / 18.3
LAT=	48.0	U=	.039 / 15.3	V=	.044 / 22.6	W=	.000381 / 10.5	T=	.118 / 18.2
LAT=	54.0	U=	.032 / 16.5	V=	.040 / 23.6	W=	.000296 / 11.1	T=	.129 / 18.0
LAT=	60.0	U=	.031 / 17.5	V=	.040 / .3	W=	.000240 / 11.6	T=	.130 / 18.0
LAT=	66.0	U=	.034 / 18.2	V=	.043 / .7	W=	.000195 / 12.2	T=	.121 / 18.0
LAT=	72.0	U=	.040 / 18.9	V=	.048 / .9	W=	.000157 / 12.8	T=	.101 / 18.0
LAT=	78.0	U=	.047 / 19.3	V=	.052 / 1.3	W=	.000119 / 13.8	T=	.072 / 17.9

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 9.525 KM

LAT= 0.0	U=	.081 / 6.0	V=	0.000 / 12.0	W=	.001881 / 19.0	T=	.245 / 16.3
LAT= 6.0	U=	.105 / 5.9	V=	.088 / 10.6	W=	.001586 / 18.9	T=	.220 / 16.4
LAT= 12.0	U=	.160 / 5.8	V=	.145 / 10.6	W=	.000885 / 18.4	T=	.161 / 16.7
LAT= 18.0	U=	.209 / 5.7	V=	.158 / 10.4	W=	.000278 / 14.1	T=	.101 / 17.6
LAT= 24.0	U=	.220 / 5.6	V=	.127 / 10.2	W=	.000641 / 9.5	T=	.071 / 19.2
LAT= 30.0	U=	.190 / 5.5	V=	.078 / 9.4	W=	.000882 / 9.1	T=	.071 / 19.9
LAT= 36.0	U=	.135 / 5.4	V=	.038 / 6.5	W=	.000890 / 9.3	T=	.083 / 19.5
LAT= 42.0	U=	.065 / 5.1	V=	.055 / 1.8	W=	.000784 / 9.7	T=	.103 / 18.9
LAT= 48.0	U=	.011 / 23.4	V=	.092 / .7	W=	.000663 / 10.3	T=	.120 / 18.4
LAT= 54.0	U=	.057 / 18.4	V=	.124 / .3	W=	.000571 / 11.0	T=	.132 / 18.2
LAT= 60.0	U=	.098 / 18.1	V=	.148 / .2	W=	.000501 / 11.4	T=	.133 / 18.1
LAT= 66.0	U=	.130 / 18.1	V=	.168 / .2	W=	.000431 / 11.8	T=	.123 / 18.0
LAT= 72.0	U=	.157 / 18.1	V=	.183 / .2	W=	.000349 / 12.1	T=	.102 / 17.9
LAT= 78.0	U=	.178 / 18.3	V=	.195 / .3	W=	.000248 / 12.4	T=	.074 / 17.8

Z= 14.879 KM

LAT= 0.0	U=	.154 / 4.5	V=	0.000 / 12.0	W=	.002632 / 16.1	T=	.228 / 12.3
LAT= 6.0	U=	.207 / 4.3	V=	.316 / 9.3	W=	.002259 / 16.0	T=	.194 / 12.4
LAT= 12.0	U=	.331 / 4.0	V=	.530 / 9.3	W=	.001364 / 15.6	T=	.110 / 12.6
LAT= 18.0	U=	.445 / 3.9	V=	.692 / 9.2	W=	.000472 / 13.3	T=	.022 / 15.0
LAT= 24.0	U=	.476 / 3.9	V=	.517 / 9.1	W=	.000575 / 7.5	T=	.054 / 23.0
LAT= 30.0	U=	.420 / 3.8	V=	.379 / 8.8	W=	.000818 / 6.8	T=	.080 / 23.3
LAT= 36.0	U=	.317 / 3.6	V=	.232 / 8.1	W=	.000798 / 7.2	T=	.076 / 23.2
LAT= 42.0	U=	.185 / 3.2	V=	.120 / 6.1	W=	.000680 / 8.3	T=	.059 / 22.9
LAT= 48.0	U=	.080 / 1.4	V=	.110 / 2.5	W=	.000607 / 9.7	T=	.041 / 22.2
LAT= 54.0	U=	.073 / 20.3	V=	.153 / .9	W=	.000603 / 10.8	T=	.027 / 21.1
LAT= 60.0	U=	.126 / 18.6	V=	.195 / .4	W=	.000592 / 11.4	T=	.022 / 19.9
LAT= 66.0	U=	.174 / 18.2	V=	.227 / .2	W=	.000547 / 11.7	T=	.019 / 19.1
LAT= 72.0	U=	.215 / 18.1	V=	.251 / .1	W=	.000460 / 11.9	T=	.015 / 18.5
LAT= 78.0	U=	.245 / 18.1	V=	.269 / .2	W=	.000332 / 12.0	T=	.011 / 18.2

Z= 20.239 KM

LAT= 0.0	U=	.212 / 22.7	V=	0.000 / 12.0	W=	.003787 / 11.2	T=	.579 / 5.9
LAT= 6.0	U=	.325 / 22.4	V=	.623 / 3.8	W=	.003276 / 11.3	T=	.490 / 5.9
LAT= 12.0	U=	.588 / 22.2	V=	1.054 / 3.8	W=	.002031 / 11.3	T=	.273 / 5.9
LAT= 18.0	U=	.834 / 22.1	V=	1.204 / 3.7	W=	.000662 / 11.8	T=	.031 / 6.5
LAT= 24.0	U=	.923 / 22.0	V=	1.100 / 3.7	W=	.000334 / 21.7	T=	.145 / 17.7
LAT= 30.0	U=	.843 / 22.0	V=	.878 / 3.5	W=	.000659 / 22.3	T=	.214 / 17.7
LAT= 36.0	U=	.684 / 21.9	V=	.638 / 3.3	W=	.000536 / 22.0	T=	.205 / 17.7
LAT= 42.0	U=	.473 / 21.7	V=	.434 / 2.8	W=	.000249 / 20.3	T=	.163 / 17.7
LAT= 48.0	U=	.314 / 21.1	V=	.311 / 2.1	W=	.000241 / 14.3	T=	.112 / 17.6
LAT= 54.0	U=	.228 / 20.2	V=	.259 / 1.3	W=	.000464 / 12.6	T=	.072 / 17.4
LAT= 60.0	U=	.200 / 19.2	V=	.249 / .7	W=	.000561 / 12.3	T=	.052 / 17.3
LAT= 66.0	U=	.210 / 18.6	V=	.258 / .4	W=	.000570 / 12.2	T=	.038 / 17.2
LAT= 72.0	U=	.238 / 18.2	V=	.274 / .2	W=	.000504 / 12.1	T=	.027 / 17.0
LAT= 78.0	U=	.265 / 18.1	V=	.290 / .2	W=	.000372 / 12.1	T=	.018 / 17.0

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 25.607 KM

LAT= 0.0	U=	.287	15.5	V=	0.000	12.0	W=	.004708	5.8	T= .941 / 22.2
LAT= 6.0	U=	.451	15.7	V=	.924	22.7	W=	.003993	5.9	T= .800 / 22.2
LAT= 12.0	U=	.835	15.8	V=	1.565	22.7	W=	.002268	6.4	T= .458 / 22.1
LAT= 18.0	U=	1.193	15.9	V=	1.792	22.7	W=	.000701	10.2	T= .081 / 20.8
LAT= 24.0	U=	1.326	15.9	V=	1.641	22.7	W=	.001434	15.2	T= .202 / 11.1
LAT= 30.0	U=	1.216	15.9	V=	1.316	22.8	W=	.001974	15.6	T= .306 / 10.9
LAT= 36.0	U=	.988	16.0	V=	.963	22.9	W=	.001958	15.4	T= .288 / 11.0
LAT= 42.0	U=	.689	16.1	V=	.658	23.0	W=	.001702	14.9	T= .215 / 11.5
LAT= 48.0	U=	.459	16.3	V=	.461	23.3	W=	.001428	14.0	T= .137 / 12.3
LAT= 54.0	U=	.328	16.8	V=	.360	23.5	W=	.001250	13.2	T= .087 / 14.0
LAT= 60.0	U=	.266	17.3	V=	.322	23.8	W=	.001117	12.7	T= .078 / 15.9
LAT= 66.0	U=	.261	17.7	V=	.319	24.0	W=	.000977	12.3	T= .075 / 16.9
LAT= 72.0	U=	.289	17.9	V=	.333	0.0	W=	.000807	12.2	T= .063 / 17.4
LAT= 78.0	U=	.319	18.0	V=	.351	.1	W=	.000575	12.1	T= .048 / 17.5

Z= 30.985 KM

LAT= 0.0	U=	.566	9.7	V=	0.000	12.0	W=	.007575	23.6	T= 1.707 / 17.2
LAT= 6.0	U=	.815	9.9	V=	1.433	16.8	W=	.006254	23.6	T= 1.463 / 17.2
LAT= 12.0	U=	1.395	10.1	V=	2.413	16.9	W=	.003022	23.5	T= .867 / 17.2
LAT= 18.0	U=	1.931	10.2	V=	2.734	16.9	W=	.000630	12.3	T= .209 / 17.5
LAT= 24.0	U=	2.112	10.3	V=	2.451	17.0	W=	.003315	11.8	T= .260 / 4.8
LAT= 30.0	U=	1.904	10.3	V=	1.889	17.1	W=	.004459	11.8	T= .428 / 4.9
LAT= 36.0	U=	1.503	10.4	V=	1.279	17.4	W=	.004471	11.8	T= .375 / 4.9
LAT= 42.0	U=	.982	10.5	V=	.755	18.0	W=	.003940	11.8	T= .222 / 4.5
LAT= 48.0	U=	.556	11.1	V=	.445	19.5	W=	.003246	11.8	T= .067 / 2.6
LAT= 54.0	U=	.296	12.9	V=	.360	21.6	W=	.002649	11.9	T= .089 / 19.1
LAT= 60.0	U=	.250	5.6	V=	.396	23.0	W=	.002201	11.9	T= .160 / 18.3
LAT= 66.0	U=	.323	17.2	V=	.456	23.6	W=	.001810	11.9	T= .183 / 18.1
LAT= 72.0	U=	.423	17.8	V=	.511	23.8	W=	.001438	11.9	T= .165 / 17.9
LAT= 78.0	U=	.497	17.9	V=	.555	23.9	W=	.001001	12.0	T= .127 / 17.9

Z= 36.378 KM

LAT= 0.0	U=	.949	5.7	V=	0.000	12.0	W=	.012192	16.0	T= 2.350 / 12.2
LAT= 6.0	U=	1.325	5.6	V=	2.223	11.7	W=	.010506	15.9	T= 1.997 / 12.3
LAT= 12.0	U=	2.193	5.6	V=	3.733	11.7	W=	.006458	15.4	T= 1.141 / 12.6
LAT= 18.0	U=	2.989	5.6	V=	4.203	11.7	W=	.002561	13.0	T= .272 / 15.5
LAT= 24.0	U=	3.247	5.6	V=	3.719	11.7	W=	.002979	8.1	T= .594 / 22.2
LAT= 30.0	U=	2.911	5.6	V=	2.764	11.7	W=	.003906	7.3	T= .860 / 22.5
LAT= 36.0	U=	2.273	5.6	V=	1.758	11.7	W=	.003857	7.6	T= .843 / 22.2
LAT= 42.0	U=	1.437	5.6	V=	.834	11.6	W=	.003439	8.6	T= .714 / 21.5
LAT= 48.0	U=	.712	5.5	V=	.170	11.0	W=	.003172	9.8	T= .590 / 20.4
LAT= 54.0	U=	.157	4.8	V=	.278	.3	W=	.003151	10.9	T= .528 / 19.3
LAT= 60.0	U=	.219	18.3	V=	.560	.1	W=	.003045	11.4	T= .514 / 18.6
LAT= 66.0	U=	.490	18.0	V=	.744	0.0	W=	.002779	11.7	T= .475 / 18.2
LAT= 72.0	U=	.715	18.0	V=	.875	0.0	W=	.002325	11.8	T= .396 / 18.0
LAT= 78.0	U=	.864	18.0	V=	.967	24.0	W=	.001659	11.9	T= .293 / 18.0

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 41.789 KM

LAT= 0.0	U=	1.063 / 2.6	V=	0.000 / 12.0	W=	.030755 / 12.8	T=	3.183 / 8.2
LAT= 6.0	U=	1.479 / 2.2	V=	2.540 / 6.4	W=	.026681 / 12.7	T=	2.621 / 8.2
LAT= 12.0	U=	2.461 / 1.8	V=	4.282 / 6.4	W=	.016770 / 12.7	T=	1.254 / 8.7
LAT= 18.0	U=	3.372 / 1.6	V=	4.858 / 6.3	W=	.005857 / 12.2	T=	.479 / 17.0
LAT= 24.0	U=	3.667 / 1.5	V=	4.366 / 6.1	W=	.002234 / 2.8	T=	1.584 / 18.9
LAT= 30.0	U=	3.289 / 1.4	V=	3.392 / 5.9	W=	.004828 / 1.8	T=	2.123 / 19.0
LAT= 36.0	U=	2.577 / 1.3	V=	2.368 / 5.3	W=	.003947 / 2.2	T=	2.205 / 18.9
LAT= 42.0	U=	1.660 / .9	V=	1.577 / 4.1	W=	.001825 / 4.2	T=	2.069 / 18.7
LAT= 48.0	U=	.959 / 23.6	V=	1.262 / 2.4	W=	.002129 / 10.0	T=	1.853 / 18.5
LAT= 54.0	U=	.734 / 20.9	V=	1.308 / 1.1	W=	.003895 / 11.4	T=	1.659 / 18.3
LAT= 60.0	U=	.909 / 19.0	V=	1.481 / .4	W=	.004658 / 11.7	T=	1.521 / 18.1
LAT= 66.0	U=	1.209 / 18.3	V=	1.661 / .1	W=	.004676 / 11.9	T=	1.336 / 18.0
LAT= 72.0	U=	1.532 / 18.1	V=	1.827 / 0.0	W=	.004060 / 11.9	T=	1.089 / 18.0
LAT= 78.0	U=	1.770 / 18.0	V=	1.964 / 24.0	W=	.002942 / 11.9	T=	.789 / 18.0

Z= 47.224 KM

LAT= 0.0	U=	.872 / 20.4	V=	0.000 / 12.0	W=	.037710 / 9.7	T=	3.221 / 2.3
LAT= 6.0	U=	1.670 / 19.8	V=	4.782 / .9	W=	.032851 / 9.8	T=	2.610 / 2.1
LAT= 12.0	U=	3.551 / 19.5	V=	.162 / .9	W=	.021110 / 10.1	T=	1.244 / .4
LAT= 18.0	U=	5.356 / 19.4	V=	.497 / .9	W=	.008778 / 11.4	T=	1.271 / 18.4
LAT= 24.0	U=	6.135 / 19.3	V=	.964 / .8	W=	.005215 / 16.5	T=	2.478 / 16.9
LAT= 30.0	U=	5.792 / 19.3	V=	7.576 / .7	W=	.007186 / 18.0	T=	3.142 / 16.7
LAT= 36.0	U=	4.929 / 19.2	V=	6.046 / .6	W=	.006729 / 17.2	T=	3.340 / 16.9
LAT= 42.0	U=	3.769 / 19.0	V=	4.759 / .5	W=	.006431 / 15.3	T=	3.309 / 17.1
LAT= 48.0	U=	2.986 / 18.7	V=	4.008 / .3	W=	.007581 / 13.5	T=	3.161 / 17.3
LAT= 54.0	U=	2.707 / 18.4	V=	3.719 / .1	W=	.009114 / 12.6	T=	2.997 / 17.6
LAT= 60.0	U=	2.773 / 18.2	V=	3.741 / 0.0	W=	.009612 / 12.2	T=	2.824 / 17.7
LAT= 66.0	U=	3.097 / 18.0	V=	3.912 / 24.0	W=	.009125 / 12.0	T=	2.523 / 17.8
LAT= 72.0	U=	3.578 / 18.0	V=	4.147 / 23.9	W=	.007715 / 12.0	T=	2.077 / 17.8
LAT= 78.0	U=	3.991 / 18.0	V=	4.383 / 23.9	W=	.005543 / 11.9	T=	1.507 / 17.8

Z= 52.691 KM

LAT= 0.0	U=	.904 / 13.8	V=	0.000 / 12.0	W=	.033563 / 5.0	T=	4.898 / 21.4
LAT= 6.0	U=	1.787 / 15.1	V=	5.880 / 22.0	W=	.028217 / 5.2	T=	4.304 / 21.2
LAT= 12.0	U=	4.043 / 15.8	V=	10.057 / 22.1	W=	.015761 / 6.2	T=	2.923 / 20.5
LAT= 18.0	U=	6.258 / 16.0	V=	11.752 / 22.1	W=	.008793 / 10.9	T=	1.759 / 18.4
LAT= 24.0	U=	7.249 / 16.1	V=	11.205 / 22.2	W=	.016249 / 13.7	T=	1.731 / 15.8
LAT= 30.0	U=	6.921 / 16.2	V=	9.632 / 22.4	W=	.020993 / 14.0	T=	2.043 / 15.1
LAT= 36.0	U=	6.001 / 16.4	V=	7.909 / 22.7	W=	.021894 / 13.8	T=	2.226 / 15.5
LAT= 42.0	U=	4.767 / 16.6	V=	6.533 / 23.0	W=	.021028 / 13.4	T=	2.400 / 16.3
LAT= 48.0	U=	4.034 / 17.0	V=	5.838 / 23.4	W=	.019643 / 12.9	T=	2.572 / 16.9
LAT= 54.0	U=	3.961 / 17.5	V=	5.713 / 23.6	W=	.018436 / 12.4	T=	2.702 / 17.4
LAT= 60.0	U=	4.328 / 17.7	V=	5.950 / 23.7	W=	.017100 / 12.2	T=	2.701 / 17.6
LAT= 66.0	U=	4.990 / 17.8	V=	6.334 / 23.8	W=	.015113 / 12.0	T=	2.496 / 17.7
LAT= 72.0	U=	5.824 / 17.8	V=	6.771 / 23.8	W=	.012336 / 12.0	T=	2.090 / 17.8
LAT= 78.0	U=	6.526 / 17.8	V=	7.178 / 23.8	W=	.008755 / 11.9	T=	1.529 / 17.8

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 51.200 KM

LAT= 0.0	U=	3.255	/	8.6	V=	0.000	/	12.0	W=	.047417	/ .1	T=	5.999	/	17.8
LAT= 6.0	U=	4.257	/	9.1	V=	5.791	/	17.5	W=	.038718	/ .1	T=	5.245	/	17.8
LAT= 12.0	U=	6.686	/	9.7	V=	9.753	/	17.5	W=	.017424	/ .2	T=	3.413	/	17.8
LAT= 18.0	U=	8.955	/	10.0	V=	11.052	/	17.7	W=	.006902	/ 11.7	T=	1.391	/	17.8
LAT= 24.0	U=	9.646	/	10.2	V=	9.957	/	17.9	W=	.025284	/ 12.0	T=	.027	/	2.8
LAT= 30.0	U=	8.581	/	10.3	V=	7.859	/	18.5	W=	.033770	/ 12.0	T=	.491	/	5.6
LAT= 36.0	U=	6.639	/	10.6	V=	5.894	/	19.5	W=	.034998	/ 12.0	T=	.270	/	5.5
LAT= 42.0	U=	4.226	/	11.4	V=	4.895	/	21.1	W=	.032579	/ 11.9	T=	.264	/	18.1
LAT= 48.0	U=	2.745	/	13.5	V=	5.110	/	22.5	W=	.028787	/ 11.9	T=	.806	/	17.9
LAT= 54.0	U=	3.125	/	16.2	V=	5.901	/	23.2	W=	.025277	/ 11.9	T=	1.210	/	17.9
LAT= 60.0	U=	4.384	/	17.3	V=	6.799	/	23.6	W=	.022411	/ 11.9	T=	1.395	/	17.9
LAT= 66.0	U=	5.742	/	17.6	V=	7.625	/	23.7	W=	.019227	/ 11.9	T=	1.380	/	17.9
LAT= 72.0	U=	7.073	/	17.8	V=	8.363	/	23.8	W=	.015460	/ 11.9	T=	1.189	/	17.8
LAT= 78.0	U=	8.094	/	17.8	V=	8.973	/	23.8	W=	.010946	/ 11.9	T=	.886	/	17.8

Z= 63.765 KM

LAT= 0.0	U=	4.451	/	7.2	V=	0.000	/	12.0	W=	.072367	/ 20.3	T=	7.038	/	15.4
LAT= 6.0	U=	5.842	/	7.4	V=	8.221	/	13.4	W=	.060497	/ 20.3	T=	6.034	/	15.5
LAT= 12.0	U=	9.041	/	7.7	V=	13.721	/	13.5	W=	.031723	/ 19.8	T=	3.590	/	15.6
LAT= 18.0	U=	11.988	/	7.8	V=	15.287	/	13.5	W=	.008117	/ 13.7	T=	.902	/	16.7
LAT= 24.0	U=	12.845	/	7.8	V=	13.192	/	13.6	W=	.027890	/ 10.0	T=	1.162	/	2.2
LAT= 30.0	U=	11.373	/	7.9	V=	9.343	/	13.8	W=	.038229	/ 9.8	T=	1.896	/	2.6
LAT= 36.0	U=	8.658	/	8.0	V=	5.130	/	14.3	W=	.038858	/ 9.9	T=	1.762	/	2.5
LAT= 42.0	U=	5.074	/	8.3	V=	1.890	/	17.3	W=	.034980	/ 10.3	T=	1.232	/	2.1
LAT= 48.0	U=	2.049	/	10.0	V=	2.859	/	22.4	W=	.029939	/ 10.7	T=	.677	/	1.0
LAT= 54.0	U=	1.992	/	15.9	V=	4.897	/	23.4	W=	.025841	/ 11.1	T=	.391	/	22.0
LAT= 60.0	U=	3.941	/	17.4	V=	6.512	/	23.7	W=	.022901	/ 11.4	T=	.430	/	19.5
LAT= 66.0	U=	5.735	/	17.7	V=	7.741	/	23.8	W=	.019742	/ 11.6	T=	.472	/	18.5
LAT= 72.0	U=	7.345	/	17.8	V=	8.719	/	23.8	W=	.015977	/ 11.7	T=	.427	/	18.2
LAT= 78.0	U=	8.530	/	17.8	V=	9.471	/	23.8	W=	.011434	/ 11.8	T=	.326	/	18.0

Z= 63.403 KM

LAT= 0.0	U=	4.997	/	4.5	V=	0.000	/	12.0	W=	.106824	/ 16.4	T=	8.933	/	11.3
LAT= 6.0	U=	6.681	/	4.3	V=	12.979	/	9.5	W=	.091212	/ 16.3	T=	7.575	/	11.3
LAT= 12.0	U=	10.542	/	4.1	V=	21.765	/	9.5	W=	.053345	/ 16.0	T=	4.262	/	11.4
LAT= 18.0	U=	14.072	/	4.0	V=	24.461	/	9.5	W=	.014089	/ 13.7	T=	.596	/	12.5
LAT= 24.0	U=	15.151	/	4.0	V=	21.561	/	9.4	W=	.043284	/ 6.6	T=	2.109	/	22.8
LAT= 30.0	U=	13.473	/	3.9	V=	16.006	/	9.3	W=	.054344	/ 6.2	T=	3.134	/	22.9
LAT= 36.0	U=	10.347	/	3.9	V=	9.945	/	8.9	W=	.052864	/ 6.5	T=	2.966	/	22.9
LAT= 42.0	U=	6.232	/	3.6	V=	4.715	/	7.7	W=	.026460	/ 7.3	T=	2.254	/	22.9
LAT= 48.0	U=	2.669	/	2.5	V=	2.643	/	3.7	W=	.020882	/ 8.6	T=	1.433	/	22.9
LAT= 54.0	U=	1.652	/	20.6	V=	4.258	/	.9	W=	.018876	/ 10.1	T=	.777	/	22.8
LAT= 60.0	U=	3.575	/	18.4	V=	6.011	/	.2	W=	.018425	/ 10.9	T=	.410	/	22.5
LAT= 66.0	U=	5.425	/	18.0	V=	7.356	/	24.0	W=	.017183	/ 11.4	T=	.200	/	21.9
LAT= 72.0	U=	7.081	/	17.9	V=	8.412	/	23.9	W=	.014577	/ 11.6	T=	.099	/	21.6
LAT= 78.0	U=	8.301	/	17.9	V=	9.213	/	23.9	W=	.010745	/ 11.7	T=	.047	/	21.3

AD-A125 720 A COMPENDIUM OF THEORETICAL ATMOSPHERIC TIDAL STRUCTURES PART I MODEL DES..(U) AIR FORCE GEOPHYSICS LAB HANSCOM AFB MA J M FORBES ET AL. 24 JUN 82 2/3

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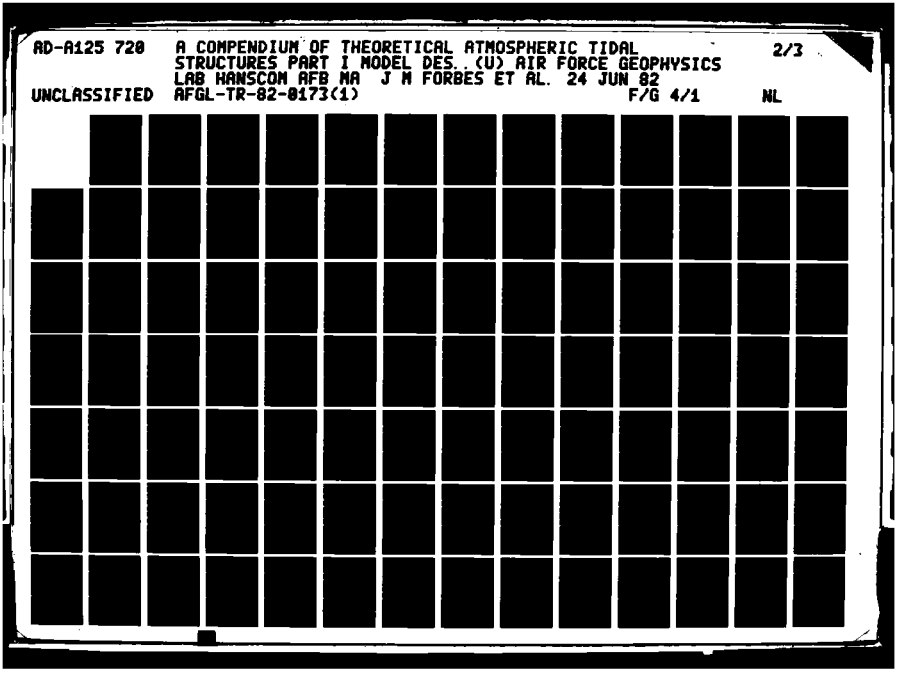

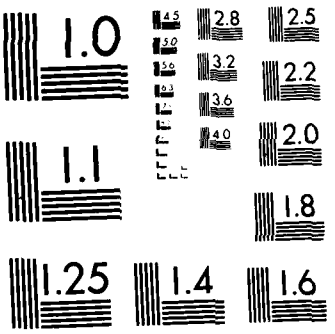

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 75.140 KM

LAT= 0.0	U=	5.533	/	22.3	V=	0.000	/	12.0	W=	.131257	/	12.6	T=	12.662	/	6.7
LAT= 6.0	U=	8.592	/	22.0	V=	19.299	/	4.3	W=	.112758	/	12.6	T=	10.753	/	6.7
LAT= 12.0	U=	15.768	/	21.7	V=	32.607	/	4.3	W=	.067743	/	12.6	T=	6.100	/	6.7
LAT= 18.0	U=	22.468	/	21.6	V=	37.160	/	4.2	W=	.017900	/	12.2	T=	.917	/	6.6
LAT= 24.0	U=	24.919	/	21.6	V=	33.742	/	4.2	W=	.017799	/	1.2	T=	2.801	/	18.7
LAT= 30.0	U=	22.766	/	21.5	V=	26.665	/	4.1	W=	.030555	/	1.0	T=	4.212	/	18.7
LAT= 36.0	U=	18.409	/	21.4	V=	19.019	/	3.8	W=	.026764	/	1.1	T=	3.927	/	18.7
LAT= 42.0	U=	12.738	/	21.3	V=	12.536	/	3.3	W=	.015643	/	1.5	T=	2.874	/	18.7
LAT= 48.0	U=	8.433	/	20.8	V=	8.640	/	2.4	W=	.004668	/	4.1	T=	1.662	/	18.8
LAT= 54.0	U=	6.153	/	19.9	V=	7.105	/	1.3	W=	.007799	/	10.7	T=	.677	/	19.2
LAT= 60.0	U=	5.564	/	18.9	V=	7.040	/	.6	W=	.012266	/	11.5	T=	.170	/	20.6
LAT= 66.0	U=	6.060	/	18.3	V=	7.540	/	.1	W=	.013717	/	11.7	T=	.158	/	4.5
LAT= 72.0	U=	7.091	/	18.0	V=	8.217	/	24.0	W=	.012539	/	11.8	T=	.258	/	5.3
LAT= 78.0	U=	8.042	/	17.9	V=	8.861	/	23.9	W=	.009548	/	11.8	T=	.239	/	5.5

Z= 81.010 KM

LAT= 0.0	U=	7.384	/	16.7	V=	0.000	/	12.0	W=	.137910	/	8.0	T=	17.767	/	1.9
LAT= 6.0	U=	11.709	/	16.7	V=	25.510	/	1.5	W=	.117706	/	8.0	T=	15.103	/	1.9
LAT= 12.0	U=	21.740	/	16.8	V=	43.144	/	1.5	W=	.068553	/	8.2	T=	8.610	/	1.9
LAT= 18.0	U=	31.100	/	16.8	V=	49.280	/	1.5	W=	.015465	/	9.8	T=	1.408	/	2.7
LAT= 24.0	U=	34.569	/	16.8	V=	44.944	/	1.5	W=	.027583	/	18.5	T=	3.854	/	13.4
LAT= 30.0	U=	31.653	/	16.8	V=	35.787	/	1.5	W=	.042164	/	18.8	T=	5.844	/	13.5
LAT= 36.0	U=	25.667	/	16.9	V=	25.813	/	1.4	W=	.039492	/	18.6	T=	5.487	/	13.4
LAT= 42.0	U=	17.821	/	16.9	V=	17.192	/	1.2	W=	.029406	/	18.1	T=	4.076	/	13.2
LAT= 48.0	U=	11.764	/	17.0	V=	11.596	/	.9	W=	.019322	/	16.8	T=	2.482	/	12.7
LAT= 54.0	U=	8.180	/	17.2	V=	8.664	/	.6	W=	.014445	/	14.8	T=	1.304	/	11.4
LAT= 60.0	U=	6.488	/	17.5	V=	7.572	/	.2	W=	.013997	/	13.4	T=	.842	/	9.5
LAT= 66.0	U=	6.226	/	17.7	V=	7.444	/	0.0	W=	.013445	/	12.7	T=	.706	/	7.6
LAT= 72.0	U=	6.820	/	17.8	V=	7.779	/	23.9	W=	.011702	/	12.2	T=	.644	/	6.5
LAT= 78.0	U=	7.519	/	17.8	V=	8.249	/	23.9	W=	.008734	/	12.0	T=	.505	/	6.1

Z= 87.062 KM

LAT= 0.0	U=	9.968	/	11.7	V=	0.000	/	12.0	W=	.144308	/	.9	T=	22.028	/	19.4
LAT= 6.0	U=	14.827	/	11.8	V=	28.189	/	17.0	W=	.121271	/	1.0	T=	18.604	/	19.4
LAT= 12.0	U=	26.096	/	12.0	V=	47.517	/	17.0	W=	.064986	/	1.0	T=	10.242	/	19.4
LAT= 18.0	U=	36.510	/	12.1	V=	53.905	/	17.1	W=	.002805	/	4.0	T=	.925	/	20.4
LAT= 24.0	U=	40.149	/	12.1	V=	48.477	/	17.1	W=	.043942	/	12.7	T=	5.877	/	7.2
LAT= 30.0	U=	36.388	/	12.1	V=	37.567	/	17.2	W=	.062357	/	12.7	T=	8.553	/	7.2
LAT= 36.0	U=	29.011	/	12.2	V=	25.701	/	17.3	W=	.060727	/	12.7	T=	8.235	/	7.2
LAT= 42.0	U=	19.395	/	12.3	V=	15.299	/	17.7	W=	.049891	/	12.6	T=	6.535	/	7.2
LAT= 48.0	U=	11.680	/	12.7	V=	8.557	/	18.6	W=	.036900	/	12.5	T=	4.555	/	7.0
LAT= 54.0	U=	6.863	/	13.6	V=	5.511	/	20.4	W=	.026329	/	12.4	T=	2.984	/	6.8
LAT= 60.0	U=	4.702	/	15.2	V=	5.183	/	22.2	W=	.020030	/	12.3	T=	2.034	/	6.6
LAT= 66.0	U=	4.749	/	16.8	V=	5.813	/	23.2	W=	.015450	/	12.1	T=	1.427	/	6.4
LAT= 72.0	U=	5.762	/	17.4	V=	6.578	/	23.7	W=	.011854	/	12.0	T=	1.064	/	5.9
LAT= 78.0	U=	6.617	/	17.7	V=	7.223	/	23.8	W=	.008232	/	11.9	T=	.727	/	5.8

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 93.363 KM

LAT= 0.0	U=	11.801	/ 6.9	V=	0.000	/ 12.0	W=	.175146	/ 19.5	T=	26.550 / 13.5
LAT= 6.0	U=	17.171	/ 6.9	V=	31.483	/ 12.9	W=	.147983	/ 19.4	T=	22.468 / 13.4
LAT= 12.0	U=	29.540	/ 6.9	V=	53.036	/ 12.9	W=	.081936	/ 19.3	T=	12.538 / 13.3
LAT= 18.0	U=	41.039	/ 7.0	V=	60.153	/ 12.9	W=	.011378	/ 16.5	T=	1.623 / 11.8
LAT= 24.0	U=	45.044	/ 7.0	V=	53.982	/ 12.9	W=	.046386	/ 8.4	T=	6.551 / 2.0
LAT= 30.0	U=	40.778	/ 7.0	V=	41.562	/ 12.9	W=	.066843	/ 8.2	T=	9.613 / 1.9
LAT= 36.0	U=	32.333	/ 7.0	V=	27.863	/ 13.0	W=	.063703	/ 8.3	T=	9.110 / 1.9
LAT= 42.0	U=	21.216	/ 7.0	V=	15.597	/ 13.0	W=	.050017	/ 8.5	T=	6.949 / 1.9
LAT= 48.0	U=	11.807	/ 7.1	V=	6.972	/ 13.3	W=	.034407	/ 8.8	T=	4.495 / 2.1
LAT= 54.0	U=	4.968	/ 7.5	V=	1.730	/ 15.2	W=	.022374	/ 9.4	T=	2.564 / 2.4
LAT= 60.0	U=	.965	/ 9.7	V=	2.217	/ 22.9	W=	.015789	/ 10.2	T=	1.371 / 2.8
LAT= 66.0	U=	2.283	/ 17.2	V=	4.119	/ 23.7	W=	.011832	/ 10.9	T=	.744 / 3.4
LAT= 72.0	U=	4.448	/ 17.4	V=	5.397	/ 23.8	W=	.009064	/ 11.3	T=	.524 / 3.6
LAT= 78.0	U=	5.651	/ 17.7	V=	6.220	/ 24.0	W=	.006062	/ 11.4	T=	.292 / 3.5

Z= 96.638 KM

LAT= 0.0	U=	12.269	/ 4.1	V=	0.000	/ 12.0	W=	.210267	/ 15.8	T=	29.573 / 10.1
LAT= 6.0	U=	18.097	/ 4.1	V=	33.433	/ 9.6	W=	.179554	/ 15.8	T=	25.148 / 10.1
LAT= 12.0	U=	31.509	/ 4.0	V=	56.357	/ 9.6	W=	.104745	/ 15.6	T=	14.355 / 10.0
LAT= 18.0	U=	44.058	/ 4.0	V=	64.012	/ 9.6	W=	.023006	/ 14.2	T=	2.491 / 8.5
LAT= 24.0	U=	48.571	/ 4.0	V=	57.657	/ 9.7	W=	.041901	/ 5.0	T=	6.527 / 22.8
LAT= 30.0	U=	44.209	/ 4.1	V=	44.687	/ 9.7	W=	.065281	/ 4.6	T=	9.913 / 22.5
LAT= 36.0	U=	35.363	/ 4.1	V=	30.350	/ 9.7	W=	.062111	/ 4.6	T=	9.452 / 22.4
LAT= 42.0	U=	23.593	/ 4.1	V=	17.560	/ 9.6	W=	.046531	/ 4.8	T=	7.200 / 22.4
LAT= 48.0	U=	13.650	/ 4.1	V=	8.599	/ 9.4	W=	.028713	/ 5.2	T=	4.587 / 22.3
LAT= 54.0	U=	6.435	/ 3.9	V=	3.123	/ 8.2	W=	.015125	/ 6.1	T=	2.499 / 22.2
LAT= 60.0	U=	2.291	/ 2.8	V=	1.717	/ 2.7	W=	.008936	/ 7.9	T=	1.314 / 21.5
LAT= 66.0	U=	1.406	/ 20.0	V=	3.251	/ .4	W=	.006803	/ 9.8	T=	.713 / 20.3
LAT= 72.0	U=	3.342	/ 17.9	V=	4.516	/ 24.0	W=	.005716	/ 10.8	T=	.476 / 19.3
LAT= 78.0	U=	4.655	/ 17.8	V=	5.379	/ 23.9	W=	.003690	/ 11.1	T=	.405 / 18.4

Z= 100.017 KM

LAT= 0.0	U=	12.112	/ .7	V=	0.000	/ 12.0	W=	.245266	/ 13.8	T=	28.927 / 8.0
LAT= 6.0	U=	18.032	/ .6	V=	34.071	/ 6.3	W=	.211153	/ 13.8	T=	24.117 / 8.1
LAT= 12.0	U=	31.743	/ .5	V=	57.430	/ 6.3	W=	.128277	/ 13.7	T=	12.410 / 8.4
LAT= 18.0	U=	44.362	/ .4	V=	65.128	/ 6.3	W=	.035655	/ 13.0	T=	2.446 / 15.5
LAT= 24.0	U=	48.675	/ .4	V=	58.476	/ 6.2	W=	.035011	/ 2.9	T=	11.050 / 18.9
LAT= 30.0	U=	43.963	/ .3	V=	45.274	/ 6.1	W=	.062795	/ 2.4	T=	14.912 / 19.1
LAT= 36.0	U=	34.860	/ .2	V=	31.028	/ 5.9	W=	.061449	/ 2.4	T=	14.537 / 19.1
LAT= 42.0	U=	23.052	/ 24.0	V=	18.684	/ 5.5	W=	.045763	/ 2.5	T=	12.085 / 19.0
LAT= 48.0	U=	13.554	/ 23.5	V=	10.734	/ 4.5	W=	.027204	/ 2.7	T=	9.032 / 18.9
LAT= 54.0	U=	7.614	/ 22.4	V=	6.924	/ 3.0	W=	.012605	/ 3.5	T=	6.300 / 18.7
LAT= 60.0	U=	5.270	/ 20.8	V=	5.884	/ 1.4	W=	.005069	/ 5.6	T=	4.396 / 18.5
LAT= 66.0	U=	4.923	/ 19.2	V=	5.913	/ .5	W=	.003569	/ 9.4	T=	2.899 / 18.4
LAT= 72.0	U=	5.614	/ 18.0	V=	6.092	/ .2	W=	.003354	/ 10.6	T=	1.664 / 18.8
LAT= 78.0	U=	5.882	/ 17.8	V=	6.156	/ .2	W=	.001536	/ 10.9	T=	.954 / 19.0

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 103.521 KM

LAT= 0.0	U=	11.924	/ 22.5	V=	0.000	/ 12.0	W=	.261912	/ 11.8	T=	25.590 / 4.1
LAT= 6.0	U=	18.347	/ 22.1	V=	38.213	/ 3.7	W=	.227503	/ 11.8	T=	20.505 / 4.0
LAT= 12.0	U=	33.409	/ 21.8	V=	64.922	/ 3.7	W=	.143537	/ 11.9	T=	8.271 / 3.5
LAT= 18.0	U=	48.040	/ 21.7	V=	75.082	/ 3.6	W=	.049239	/ 12.0	T=	6.130 / 17.6
LAT= 24.0	U=	54.307	/ 21.5	V=	69.894	/ 3.5	W=	.020199	/ 23.3	T=	16.114 / 16.9
LAT= 30.0	U=	51.046	/ 21.4	V=	57.428	/ 3.3	W=	.048686	/ 23.6	T=	20.182 / 16.8
LAT= 36.0	U=	43.036	/ 21.2	V=	43.330	/ 3.0	W=	.047583	/ 23.7	T=	19.773 / 16.9
LAT= 42.0	U=	31.803	/ 20.8	V=	30.784	/ 2.5	W=	.032401	/ 23.7	T=	17.125 / 16.9
LAT= 48.0	U=	22.896	/ 20.3	V=	22.540	/ 1.9	W=	.014474	/ 23.7	T=	13.818 / 17.1
LAT= 54.0	U=	17.343	/ 19.5	V=	17.869	/ 1.2	W=	.000582	/ 22.6	T=	10.817 / 17.2
LAT= 60.0	U=	14.291	/ 18.9	V=	15.610	/ .6	W=	.006726	/ 12.0	T=	8.730 / 17.2
LAT= 66.0	U=	13.194	/ 18.4	V=	14.574	/ .2	W=	.009302	/ 12.0	T=	6.915 / 17.2
LAT= 72.0	U=	13.307	/ 17.9	V=	14.027	/ 24.0	W=	.008266	/ 11.9	T=	5.219 / 17.3
LAT= 78.0	U=	12.860	/ 17.9	V=	13.473	/ 23.9	W=	.005226	/ 11.9	T=	3.475 / 17.3

Z= 107.177 KM

LAT= 0.0	U=	8.429	/ 20.5	V=	.002	/ 11.9	W=	.253740	/ 9.7	T=	32.292 / 2.1
LAT= 6.0	U=	14.734	/ 19.9	V=	39.430	/ 1.6	W=	.220823	/ 9.7	T=	26.906 / 2.0
LAT= 12.0	U=	29.867	/ 19.5	V=	67.451	/ 1.6	W=	.141337	/ 10.0	T=	13.965 / 1.6
LAT= 18.0	U=	44.947	/ 19.3	V=	79.023	/ 1.5	W=	.056354	/ 11.2	T=	3.560 / 19.3
LAT= 24.0	U=	52.154	/ 19.3	V=	75.095	/ 1.5	W=	.032998	/ 17.2	T=	12.243 / 15.5
LAT= 30.0	U=	50.184	/ 19.2	V=	63.693	/ 1.4	W=	.051231	/ 19.0	T=	16.335 / 15.2
LAT= 36.0	U=	43.662	/ 19.2	V=	50.385	/ 1.3	W=	.049078	/ 18.9	T=	15.777 / 15.2
LAT= 42.0	U=	33.910	/ 19.1	V=	38.277	/ 1.1	W=	.037261	/ 18.1	T=	13.070 / 15.3
LAT= 48.0	U=	26.228	/ 18.9	V=	30.061	/ .8	W=	.026501	/ 16.4	T=	9.817 / 15.5
LAT= 54.0	U=	21.610	/ 18.6	V=	25.191	/ .5	W=	.022714	/ 14.3	T=	7.089 / 15.8
LAT= 60.0	U=	19.152	/ 18.4	V=	22.825	/ .2	W=	.023221	/ 13.2	T=	5.363 / 16.0
LAT= 66.0	U=	18.793	/ 18.2	V=	21.921	/ .1	W=	.022036	/ 12.6	T=	4.159 / 16.3
LAT= 72.0	U=	19.806	/ 17.9	V=	21.761	/ 24.0	W=	.018498	/ 12.2	T=	3.343 / 16.8
LAT= 78.0	U=	20.748	/ 17.8	V=	21.903	/ 23.9	W=	.013902	/ 12.0	T=	2.619 / 17.0

Z= 111.019 KM

LAT= 0.0	U=	4.985	/ 15.1	V=	.003	/ 11.3	W=	.221609	/ 6.6	T=	38.841 / 22.8
LAT= 6.0	U=	10.625	/ 15.8	V=	35.786	/ 22.6	W=	.190388	/ 6.8	T=	32.988 / 22.8
LAT= 12.0	U=	24.081	/ 16.1	V=	61.192	/ 22.6	W=	.116079	/ 7.5	T=	18.738 / 23.0
LAT= 18.0	U=	37.014	/ 16.2	V=	71.464	/ 22.6	W=	.054160	/ 10.7	T=	3.167 / 1.1
LAT= 24.0	U=	42.638	/ 16.3	V=	67.773	/ 22.7	W=	.073534	/ 14.6	T=	9.657 / 9.8
LAT= 30.0	U=	40.269	/ 16.3	V=	57.464	/ 22.7	W=	.094427	/ 15.4	T=	14.589 / 10.0
LAT= 36.0	U=	34.235	/ 16.4	V=	45.797	/ 22.9	W=	.093301	/ 15.4	T=	14.471 / 9.9
LAT= 42.0	U=	25.883	/ 16.6	V=	35.476	/ 23.1	W=	.079816	/ 15.0	T=	11.923 / 9.7
LAT= 48.0	U=	20.010	/ 16.9	V=	28.837	/ 23.3	W=	.063795	/ 14.4	T=	8.534 / 9.4
LAT= 54.0	U=	17.500	/ 17.2	V=	25.312	/ 23.5	W=	.049830	/ 13.8	T=	5.448 / 8.7
LAT= 60.0	U=	17.030	/ 17.7	V=	23.923	/ 23.7	W=	.040617	/ 13.3	T=	3.828 / 7.9
LAT= 66.0	U=	18.443	/ 17.8	V=	23.871	/ 23.8	W=	.032887	/ 12.8	T=	2.550 / 7.1
LAT= 72.0	U=	20.912	/ 17.7	V=	24.505	/ 23.8	W=	.025435	/ 12.6	T=	1.328 / 6.1
LAT= 78.0	U=	23.530	/ 17.8	V=	25.567	/ 23.9	W=	.018625	/ 12.4	T=	.665 / 4.4

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 115.091 KM

LAT= 0.0	U=	8.225	/	10.8	V=	.004	/	10.6	W=	.178849	/	4.0	T=	33.814	/	20.2
LAT= 6.0	U=	12.317	/	11.9	V=	30.865	/	19.7	W=	.146766	/	4.2	T=	28.058	/	20.3
LAT= 12.0	U=	23.137	/	12.8	V=	52.611	/	19.7	W=	.074615	/	5.4	T=	14.200	/	21.1
LAT= 18.0	U=	33.698	/	13.1	V=	61.094	/	19.8	W=	.052390	/	11.2	T=	6.327	/	3.7
LAT= 24.0	U=	37.784	/	13.2	V=	57.435	/	19.9	W=	.104403	/	13.4	T=	16.233	/	6.3
LAT= 30.0	U=	34.902	/	13.3	V=	48.032	/	20.1	W=	.128963	/	13.7	T=	20.880	/	6.6
LAT= 36.0	U=	28.801	/	13.4	V=	37.667	/	20.5	W=	.126338	/	13.7	T=	20.408	/	6.6
LAT= 42.0	U=	20.516	/	13.7	V=	29.174	/	21.1	W=	.110581	/	13.6	T=	17.326	/	6.5
LAT= 48.0	U=	14.841	/	14.4	V=	24.440	/	21.9	W=	.089048	/	13.5	T=	13.278	/	6.3
LAT= 54.0	U=	13.188	/	15.5	V=	22.872	/	22.6	W=	.067664	/	13.3	T=	9.404	/	5.9
LAT= 60.0	U=	14.277	/	16.7	V=	23.257	/	23.1	W=	.052333	/	13.1	T=	6.985	/	5.5
LAT= 66.0	U=	17.324	/	17.2	V=	24.538	/	23.4	W=	.039678	/	13.0	T=	4.932	/	5.1
LAT= 72.0	U=	21.097	/	17.3	V=	26.222	/	23.6	W=	.028690	/	13.0	T=	3.003	/	5.0
LAT= 78.0	U=	24.998	/	17.5	V=	28.164	/	23.7	W=	.019057	/	12.8	T=	1.750	/	4.9

Z= 119.451 KM

LAT= 0.0	U=	10.972	/	8.8	V=	.004	/	10.3	W=	.129738	/	23.4	T=	26.215	/	17.6
LAT= 6.0	U=	14.356	/	9.5	V=	25.787	/	17.1	W=	.098818	/	23.3	T=	20.807	/	17.7
LAT= 12.0	U=	22.979	/	10.3	V=	43.747	/	17.2	W=	.025595	/	21.6	T=	7.827	/	18.2
LAT= 18.0	U=	31.409	/	10.6	V=	50.419	/	17.3	W=	.065530	/	12.6	T=	7.254	/	4.4
LAT= 24.0	U=	34.495	/	10.8	V=	46.675	/	17.5	W=	.127135	/	12.2	T=	17.568	/	5.0
LAT= 30.0	U=	31.624	/	10.9	V=	38.079	/	17.9	W=	.151052	/	12.2	T=	21.262	/	5.1
LAT= 36.0	U=	25.846	/	11.0	V=	29.047	/	18.7	W=	.146744	/	12.3	T=	19.933	/	5.1
LAT= 42.0	U=	17.884	/	11.5	V=	22.778	/	19.9	W=	.129452	/	12.4	T=	16.242	/	5.1
LAT= 48.0	U=	12.525	/	12.8	V=	21.188	/	21.3	W=	.105542	/	12.6	T=	11.690	/	5.0
LAT= 54.0	U=	12.035	/	14.7	V=	22.828	/	22.4	W=	.081054	/	12.7	T=	7.350	/	4.9
LAT= 60.0	U=	15.043	/	16.3	V=	25.780	/	22.9	W=	.062168	/	12.8	T=	4.670	/	4.8
LAT= 66.0	U=	19.848	/	16.9	V=	28.875	/	23.2	W=	.046261	/	13.0	T=	2.763	/	4.9
LAT= 72.0	U=	25.029	/	17.1	V=	31.934	/	23.4	W=	.032495	/	13.4	T=	1.544	/	6.1
LAT= 78.0	U=	30.152	/	17.2	V=	34.857	/	23.5	W=	.019449	/	13.6	T=	1.100	/	7.2

Z= 124.175 KM

LAT= 0.0	U=	12.776	/	6.7	V=	.004	/	10.5	W=	.149916	/	19.7	T=	26.262	/	14.6
LAT= 6.0	U=	15.694	/	7.1	V=	19.683	/	14.9	W=	.124464	/	19.2	T=	21.697	/	14.5
LAT= 12.0	U=	22.718	/	7.6	V=	32.906	/	15.0	W=	.081231	/	16.8	T=	10.722	/	13.8
LAT= 18.0	U=	29.262	/	7.9	V=	36.909	/	15.2	W=	.101549	/	13.2	T=	4.138	/	6.9
LAT= 24.0	U=	31.015	/	8.0	V=	32.493	/	15.6	W=	.147932	/	12.0	T=	11.279	/	4.3
LAT= 30.0	U=	27.336	/	8.2	V=	24.579	/	16.4	W=	.167294	/	11.7	T=	13.683	/	4.0
LAT= 36.0	U=	20.835	/	8.6	V=	17.887	/	18.0	W=	.161696	/	11.7	T=	11.806	/	3.9
LAT= 42.0	U=	12.276	/	9.6	V=	17.031	/	20.4	W=	.144945	/	11.9	T=	8.191	/	4.1
LAT= 48.0	U=	8.031	/	12.7	V=	21.240	/	22.0	W=	.121212	/	12.2	T=	4.003	/	4.5
LAT= 54.0	U=	11.972	/	15.5	V=	26.889	/	22.8	W=	.095903	/	12.5	T=	.688	/	9.6
LAT= 60.0	U=	18.745	/	16.7	V=	32.440	/	23.1	W=	.074468	/	12.8	T=	2.229	/	14.1
LAT= 66.0	U=	25.828	/	17.1	V=	37.429	/	23.3	W=	.056281	/	13.2	T=	3.139	/	14.1
LAT= 72.0	U=	32.758	/	17.2	V=	41.968	/	23.4	W=	.040740	/	13.8	T=	3.185	/	13.4
LAT= 78.0	U=	39.331	/	17.3	V=	45.981	/	23.4	W=	.024573	/	14.5	T=	2.248	/	12.5

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 129.367 KM

LAT= 0.0	U=	12.969	/	4.9	V=	.002	/	11.1	W=	.227677	/ 17.4	T=	32.496	/	12.8
LAT= 6.0	U=	15.296	/	5.2	V=	14.455	/	13.0	W=	.205652	/ 17.0	T=	28.526	/	12.8
LAT= 12.0	U=	20.661	/	5.6	V=	23.504	/	13.1	W=	.163526	/ 15.6	T=	18.998	/	12.8
LAT= 18.0	U=	25.146	/	5.8	V=	24.814	/	13.3	W=	.154285	/ 13.4	T=	8.643	/	12.8
LAT= 24.0	U=	25.234	/	6.0	V=	18.988	/	13.8	W=	.176706	/ 12.0	T=	1.569	/	14.2
LAT= 30.0	U=	20.427	/	6.1	V=	10.793	/	15.5	W=	.187653	/ 11.5	T=	1.703	/	20.7
LAT= 36.0	U=	12.877	/	6.4	V=	9.435	/	20.0	W=	.179466	/ 11.5	T=	2.815	/	18.1
LAT= 42.0	U=	3.263	/	8.6	V=	17.700	/	22.3	W=	.164608	/ 11.7	T=	4.983	/	16.1
LAT= 48.0	U=	7.815	/	16.5	V=	20.693	/	22.9	W=	.142214	/ 12.0	T=	7.922	/	15.3
LAT= 54.0	U=	16.705	/	17.0	V=	34.922	/	23.2	W=	.116554	/ 12.4	T=	10.588	/	15.0
LAT= 60.0	U=	26.028	/	17.4	V=	42.361	/	23.4	W=	.092789	/ 12.7	T=	11.414	/	14.7
LAT= 66.0	U=	34.879	/	17.4	V=	48.915	/	23.4	W=	.072196	/ 13.1	T=	10.778	/	14.4
LAT= 72.0	U=	43.512	/	17.4	V=	54.861	/	23.4	W=	.055171	/ 13.8	T=	8.829	/	14.0
LAT= 78.0	U=	51.511	/	17.4	V=	59.994	/	23.4	W=	.035903	/ 14.6	T=	5.532	/	13.4

Z= 135.169 KM

LAT= 0.0	U=	14.589	/	2.8	V=	.002	/	12.9	W=	.347469	/ 15.6	T=	41.484	/	12.2
LAT= 6.0	U=	16.371	/	2.9	V=	10.618	/	9.4	W=	.322752	/ 15.4	T=	37.853	/	12.3
LAT= 12.0	U=	20.363	/	3.1	V=	16.760	/	9.3	W=	.267256	/ 14.6	T=	29.383	/	12.8
LAT= 18.0	U=	23.209	/	3.2	V=	16.550	/	8.9	W=	.222716	/ 13.3	T=	21.357	/	13.8
LAT= 24.0	U=	22.006	/	3.1	V=	11.005	/	7.6	W=	.208635	/ 12.1	T=	17.833	/	15.1
LAT= 30.0	U=	16.884	/	2.6	V=	8.409	/	3.4	W=	.204252	/ 11.5	T=	17.947	/	15.8
LAT= 36.0	U=	10.427	/	1.2	V=	16.118	/	.6	W=	.195164	/ 11.5	T=	19.302	/	15.8
LAT= 42.0	U=	9.315	/	20.9	V=	26.602	/	24.0	W=	.184495	/ 11.7	T=	20.426	/	15.4
LAT= 48.0	U=	16.688	/	18.7	V=	36.495	/	23.7	W=	.166935	/ 12.0	T=	21.695	/	15.0
LAT= 54.0	U=	25.475	/	17.9	V=	45.713	/	23.6	W=	.143451	/ 12.3	T=	22.690	/	14.7
LAT= 60.0	U=	35.970	/	17.9	V=	54.406	/	23.5	W=	.117747	/ 12.5	T=	21.901	/	14.5
LAT= 66.0	U=	46.245	/	17.8	V=	62.272	/	23.6	W=	.094736	/ 12.8	T=	19.520	/	14.2
LAT= 72.0	U=	56.591	/	17.8	V=	69.573	/	23.6	W=	.076045	/ 13.6	T=	15.633	/	13.9
LAT= 78.0	U=	65.963	/	17.7	V=	75.885	/	23.6	W=	.052777	/ 14.2	T=	9.928	/	13.5

Z= 141.772 KM

LAT= 0.0	U=	18.854	/	1.0	V=	.002	/	14.3	W=	.471222	/ 14.4	T=	45.981	/	12.3
LAT= 6.0	U=	20.408	/	1.0	V=	10.284	/	6.6	W=	.442047	/ 14.3	T=	43.852	/	12.5
LAT= 12.0	U=	23.873	/	1.0	V=	16.906	/	6.2	W=	.373752	/ 13.8	T=	39.441	/	13.2
LAT= 18.0	U=	26.426	/	.7	V=	18.919	/	5.4	W=	.303666	/ 13.1	T=	36.651	/	14.1
LAT= 24.0	U=	26.151	/	.3	V=	19.214	/	3.9	W=	.259185	/ 12.3	T=	36.540	/	14.9
LAT= 30.0	U=	23.331	/	23.5	V=	22.482	/	2.1	W=	.238344	/ 11.8	T=	37.282	/	15.2
LAT= 36.0	U=	21.054	/	22.1	V=	29.544	/	.9	W=	.226453	/ 11.7	T=	37.739	/	15.2
LAT= 42.0	U=	23.200	/	20.4	V=	38.650	/	.3	W=	.219745	/ 11.9	T=	37.219	/	15.0
LAT= 48.0	U=	29.238	/	19.2	V=	48.257	/	24.0	W=	.206090	/ 12.1	T=	36.502	/	14.7
LAT= 54.0	U=	37.081	/	18.6	V=	57.951	/	23.8	W=	.183088	/ 12.2	T=	35.442	/	14.6
LAT= 60.0	U=	48.025	/	18.3	V=	67.656	/	23.8	W=	.153617	/ 12.3	T=	32.724	/	14.4
LAT= 66.0	U=	59.532	/	18.1	V=	76.783	/	23.7	W=	.127499	/ 12.5	T=	28.530	/	14.1
LAT= 72.0	U=	71.588	/	18.1	V=	85.471	/	23.7	W=	.106212	/ 13.0	T=	22.916	/	13.8
LAT= 78.0	U=	82.223	/	17.9	V=	93.063	/	23.7	W=	.077076	/ 13.4	T=	15.050	/	13.5

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 149.425 KM

LAT= 0.0	U= 25.518 / 23.7	V= .004 / 14.7	W= .608092 / 13.5	T= 51.000 / 13.0
LAT= 6.0	U= 26.983 / 23.7	V= 11.676 / 4.1	W= .574636 / 13.4	T= 51.045 / 13.2
LAT= 12.0	U= 30.560 / 23.6	V= 20.922 / 3.8	W= .492401 / 13.2	T= 51.572 / 13.7
LAT= 18.0	U= 33.770 / 23.3	V= 27.032 / 3.2	W= .400690 / 12.7	T= 53.321 / 14.3
LAT= 24.0	U= 34.715 / 22.8	V= 31.244 / 2.4	W= .332744 / 12.4	T= 55.263 / 14.6
LAT= 30.0	U= 34.029 / 22.2	V= 36.322 / 1.5	W= .296822 / 12.1	T= 55.904 / 14.8
LAT= 36.0	U= 33.930 / 21.3	V= 43.048 / .9	W= .281521 / 12.0	T= 55.187 / 14.7
LAT= 42.0	U= 36.911 / 20.3	V= 51.183 / .4	W= .276945 / 12.1	T= 53.300 / 14.6
LAT= 48.0	U= 42.459 / 19.5	V= 60.531 / .1	W= .264443 / 12.1	T= 50.675 / 14.4
LAT= 54.0	U= 49.935 / 18.9	V= 70.655 / 0.0	W= .238980 / 12.1	T= 47.452 / 14.3
LAT= 60.0	U= 61.428 / 18.6	V= 81.359 / 24.0	W= .203807 / 12.1	T= 42.707 / 14.1
LAT= 66.0	U= 74.158 / 18.4	V= 91.802 / 23.9	W= .173718 / 12.1	T= 36.857 / 13.9
LAT= 72.0	U= 87.978 / 18.3	V= 102.001 / 23.9	W= .149816 / 12.3	T= 29.886 / 13.7
LAT= 78.0	U= 99.841 / 18.1	V= 111.025 / 23.9	W= .114088 / 12.6	T= 20.342 / 13.4

Z= 158.420 KM

LAT= 0.0	U= 33.496 / 23.0	V= .006 / 14.7	W= .753591 / 12.7	T= 62.077 / 13.6
LAT= 6.0	U= 34.811 / 22.9	V= 13.721 / 2.5	W= .716358 / 12.7	T= 63.399 / 13.7
LAT= 12.0	U= 38.269 / 22.6	V= 25.272 / 2.3	W= .624634 / 12.6	T= 66.518 / 14.0
LAT= 18.0	U= 41.943 / 22.2	V= 33.871 / 1.9	W= .518412 / 12.5	T= 70.372 / 14.3
LAT= 24.0	U= 44.152 / 21.9	V= 40.357 / 1.5	W= .435341 / 12.3	T= 73.164 / 14.5
LAT= 30.0	U= 44.999 / 21.4	V= 46.696 / 1.0	W= .389745 / 12.1	T= 73.348 / 14.6
LAT= 36.0	U= 46.353 / 20.7	V= 53.781 / .6	W= .369850 / 12.0	T= 71.298 / 14.5
LAT= 42.0	U= 50.333 / 20.2	V= 62.137 / .5	W= .364076 / 12.0	T= 68.048 / 14.4
LAT= 48.0	U= 55.982 / 19.6	V= 71.773 / .3	W= .347997 / 12.0	T= 63.508 / 14.2
LAT= 54.0	U= 63.479 / 19.1	V= 82.582 / .3	W= .315281 / 11.9	T= 57.957 / 14.1
LAT= 60.0	U= 75.473 / 18.9	V= 94.451 / .2	W= .271806 / 11.7	T= 50.976 / 14.0
LAT= 66.0	U= 89.298 / 18.7	V= 106.335 / .2	W= .236972 / 11.6	T= 43.506 / 13.9
LAT= 72.0	U= 104.913 / 18.4	V= 118.212 / .1	W= .211253 / 11.7	T= 35.581 / 13.7
LAT= 78.0	U= 117.926 / 18.2	V= 128.888 / .1	W= .169429 / 11.8	T= 24.964 / 13.5

Z= 181.310 KM

LAT= 0.0	U= 48.022 / 22.0	V= .007 / 14.8	W= 1.133871 / 11.5	T= 90.193 / 14.2
LAT= 6.0	U= 48.714 / 21.8	V= 16.872 / .7	W= 1.084456 / 11.5	T= 92.372 / 14.2
LAT= 12.0	U= 51.332 / 21.5	V= 31.591 / .6	W= .963947 / 11.6	T= 96.773 / 14.3
LAT= 18.0	U= 54.649 / 21.3	V= 43.122 / .6	W= .824493 / 11.7	T= 101.055 / 14.3
LAT= 24.0	U= 58.030 / 20.9	V= 51.919 / .6	W= .716962 / 11.8	T= 103.269 / 14.3
LAT= 30.0	U= 61.283 / 20.6	V= 59.768 / .5	W= .656863 / 11.8	T= 101.648 / 14.3
LAT= 36.0	U= 65.157 / 20.3	V= 67.819 / .5	W= .630047 / 11.8	T= 96.845 / 14.3
LAT= 42.0	U= 71.573 / 20.0	V= 76.998 / .5	W= .618709 / 11.6	T= 91.248 / 14.2
LAT= 48.0	U= 78.702 / 19.7	V= 88.002 / .5	W= .588183 / 11.4	T= 82.700 / 14.1
LAT= 54.0	U= 86.968 / 19.4	V= 100.719 / .5	W= .528302 / 11.3	T= 71.504 / 14.0
LAT= 60.0	U= 99.764 / 19.2	V= 115.054 / .4	W= .457439 / 11.0	T= 59.051 / 13.9
LAT= 66.0	U= 115.780 / 18.9	V= 129.954 / .4	W= .410102 / 10.8	T= 48.476 / 13.8
LAT= 72.0	U= 134.831 / 18.7	V= 145.246 / .4	W= .384803 / 10.9	T= 39.738 / 13.7
LAT= 78.0	U= 150.045 / 18.5	V= 159.367 / .3	W= .332437 / 10.8	T= 28.451 / 13.6

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 209.865 KM

LAT= 0.0	U= 53.575 / 21.5	V= .008 / 15.2	W= 1.507425 / 10.7	T= 111.533 / 14.4
LAT= 6.0	U= 53.727 / 21.3	V= 16.633 / 23.7	W= 1.454737 / 10.7	T= 113.785 / 14.4
LAT= 12.0	U= 55.322 / 21.0	V= 31.293 / 23.8	W= 1.329497 / 10.9	T= 117.657 / 14.3
LAT= 18.0	U= 58.020 / 20.7	V= 43.134 / 0.0	W= 1.186667 / 11.1	T= 120.673 / 14.3
LAT= 24.0	U= 62.211 / 20.4	V= 52.814 / .2	W= 1.084494 / 11.3	T= 121.738 / 14.3
LAT= 30.0	U= 67.428 / 20.3	V= 62.031 / .4	W= 1.025792 / 11.3	T= 118.296 / 14.2
LAT= 36.0	U= 73.933 / 20.1	V= 71.759 / .5	W= .995942 / 11.2	T= 111.069 / 14.2
LAT= 42.0	U= 83.283 / 20.0	V= 82.779 / .6	W= .970237 / 11.0	T= 104.090 / 14.1
LAT= 48.0	U= 92.171 / 19.8	V= 95.655 / .6	W= .902426 / 10.8	T= 91.865 / 14.1
LAT= 54.0	U= 101.107 / 19.5	V= 110.275 / .7	W= .782717 / 10.6	T= 74.792 / 14.1
LAT= 60.0	U= 114.279 / 19.3	V= 126.596 / .6	W= .659833 / 10.4	T= 57.258 / 14.1
LAT= 66.0	U= 131.559 / 19.1	V= 143.681 / .6	W= .587298 / 10.2	T= 44.297 / 14.1
LAT= 72.0	U= 153.335 / 18.8	V= 161.441 / .5	W= .564131 / 10.2	T= 35.842 / 14.1
LAT= 78.0	U= 170.447 / 18.6	V= 178.161 / .4	W= .502451 / 10.2	T= 24.992 / 14.1

Z= 240.988 KM

LAT= 0.0	U= 53.103 / 21.1	V= .009 / 15.5	W= 1.916787 / 10.2	T= 121.910 / 14.4
LAT= 6.0	U= 52.905 / 20.9	V= 15.785 / 23.1	W= 1.861370 / 10.3	T= 124.172 / 14.4
LAT= 12.0	U= 53.815 / 20.6	V= 29.685 / 23.4	W= 1.728448 / 10.5	T= 127.441 / 14.4
LAT= 18.0	U= 56.220 / 20.3	V= 41.108 / 23.7	W= 1.577951 / 10.7	T= 129.230 / 14.4
LAT= 24.0	U= 61.117 / 20.2	V= 51.167 / .1	W= 1.479880 / 10.8	T= 129.645 / 14.3
LAT= 30.0	U= 68.127 / 20.1	V= 61.487 / .4	W= 1.420305 / 10.8	T= 125.152 / 14.2
LAT= 36.0	U= 77.293 / 20.1	V= 72.811 / .7	W= 1.385481 / 10.7	T= 116.385 / 14.2
LAT= 42.0	U= 89.359 / 20.0	V= 85.681 / .8	W= 1.340892 / 10.6	T= 108.698 / 14.2
LAT= 48.0	U= 99.774 / 19.8	V= 100.109 / .8	W= 1.220472 / 10.4	T= 94.129 / 14.1
LAT= 54.0	U= 108.778 / 19.6	V= 116.007 / .8	W= 1.016064 / 10.2	T= 73.079 / 14.2
LAT= 60.0	U= 121.702 / 19.3	V= 133.310 / .8	W= .821688 / 9.9	T= 53.132 / 14.3
LAT= 66.0	U= 139.795 / 19.1	V= 151.417 / .8	W= .715387 / 9.7	T= 39.328 / 14.4
LAT= 72.0	U= 162.991 / 18.9	V= 170.298 / .7	W= .693155 / 9.7	T= 31.521 / 14.5
LAT= 78.0	U= 181.184 / 18.7	V= 188.275 / .6	W= .621262 / 9.7	T= 21.546 / 14.6

Z= 272.801 KM

LAT= 0.0	U= 53.181 / 20.9	V= .009 / 15.6	W= 2.346809 / 10.0	T= 125.659 / 14.5
LAT= 6.0	U= 52.815 / 20.8	V= 15.266 / 23.1	W= 2.291467 / 10.1	T= 127.990 / 14.5
LAT= 12.0	U= 53.396 / 20.5	V= 28.817 / 23.4	W= 2.156330 / 10.2	T= 130.794 / 14.5
LAT= 18.0	U= 55.686 / 20.2	V= 40.238 / 23.8	W= 1.999405 / 10.4	T= 131.684 / 14.4
LAT= 24.0	U= 61.377 / 20.1	V= 50.822 / .2	W= 1.904583 / 10.5	T= 131.926 / 14.3
LAT= 30.0	U= 69.809 / 20.0	V= 62.304 / .5	W= 1.840414 / 10.5	T= 126.682 / 14.3
LAT= 36.0	U= 80.877 / 20.0	V= 75.074 / .7	W= 1.792865 / 10.4	T= 117.176 / 14.3
LAT= 42.0	U= 94.628 / 19.9	V= 89.245 / .8	W= 1.719805 / 10.3	T= 108.985 / 14.3
LAT= 48.0	U= 105.800 / 19.8	V= 104.663 / .9	W= 1.537483 / 10.1	T= 93.366 / 14.2
LAT= 54.0	U= 114.511 / 19.7	V= 121.246 / .9	W= 1.235249 / 9.9	T= 70.716 / 14.2
LAT= 60.0	U= 127.105 / 19.5	V= 138.907 / .8	W= .961449 / 9.6	T= 50.999 / 14.4
LAT= 66.0	U= 145.285 / 19.2	V= 157.383 / .8	W= .814152 / 9.4	T= 37.475 / 14.6
LAT= 72.0	U= 169.350 / 18.9	V= 176.646 / .7	W= .789221 / 9.3	T= 29.894 / 14.7
LAT= 78.0	U= 188.205 / 18.7	V= 195.246 / .6	W= .703524 / 9.4	T= 20.344 / 14.9

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 304.762 KM

LAT= 0.0	U= 55.232 / 20.8	V= .010 / 15.7	W= 2.776750 / 10.0	T= 126.542 / 14.6
LAT= 6.0	U= 55.052 / 20.6	V= 14.966 / 23.2	W= 2.729882 / 10.0	T= 128.871 / 14.5
LAT= 12.0	U= 55.957 / 20.4	V= 28.594 / 23.5	W= 2.600430 / 10.1	T= 131.478 / 14.5
LAT= 18.0	U= 58.354 / 20.1	V= 40.495 / 23.9	W= 2.442120 / 10.2	T= 131.839 / 14.5
LAT= 24.0	U= 64.700 / 20.0	V= 51.737 / .3	W= 2.350715 / 10.3	T= 132.071 / 14.5
LAT= 30.0	U= 73.825 / 20.0	V= 64.134 / .6	W= 2.277999 / 10.3	T= 126.814 / 14.4
LAT= 36.0	U= 85.657 / 20.0	V= 77.962 / .8	W= 2.211239 / 10.2	T= 116.783 / 14.3
LAT= 42.0	U= 100.249 / 19.9	V= 93.146 / 1.0	W= 2.108817 / 10.0	T= 108.465 / 14.3
LAT= 48.0	U= 111.584 / 19.8	V= 109.287 / 1.0	W= 1.859720 / 9.9	T= 92.796 / 14.2
LAT= 54.0	U= 119.791 / 19.7	V= 126.314 / 1.0	W= 1.456280 / 9.6	T= 70.195 / 14.3
LAT= 60.0	U= 131.922 / 19.5	V= 144.117 / .9	W= 1.099317 / 9.3	T= 50.499 / 14.5
LAT= 66.0	U= 150.116 / 19.2	V= 162.746 / .9	W= .909215 / 9.0	T= 37.001 / 14.7
LAT= 72.0	U= 174.669 / 18.9	V= 182.184 / .8	W= .876003 / 9.0	T= 29.452 / 14.8
LAT= 78.0	U= 193.947 / 18.7	V= 201.076 / .7	W= .772789 / 9.1	T= 20.019 / 15.1

Z= 336.754 KM

LAT= 0.0	U= 57.922 / 20.7	V= .010 / 15.7	W= 3.257045 / 9.9	T= 127.800 / 14.6
LAT= 6.0	U= 57.724 / 20.6	V= 15.154 / 23.3	W= 3.205287 / 9.9	T= 130.191 / 14.6
LAT= 12.0	U= 58.617 / 20.4	V= 29.071 / 23.6	W= 3.067137 / 10.0	T= 132.743 / 14.6
LAT= 18.0	U= 61.088 / 20.2	V= 41.407 / 24.0	W= 2.895575 / 10.1	T= 133.009 / 14.6
LAT= 24.0	U= 67.788 / 20.0	V= 53.264 / .4	W= 2.796795 / 10.2	T= 133.176 / 14.5
LAT= 30.0	U= 77.400 / 20.0	V= 66.384 / .8	W= 2.709291 / 10.2	T= 127.861 / 14.4
LAT= 36.0	U= 89.845 / 20.0	V= 80.993 / 1.0	W= 2.620224 / 10.1	T= 117.685 / 14.4
LAT= 42.0	U= 105.017 / 20.0	V= 96.990 / 1.0	W= 2.490610 / 9.9	T= 109.316 / 14.4
LAT= 48.0	U= 116.473 / 19.8	V= 113.664 / 1.0	W= 2.180246 / 9.8	T= 93.519 / 14.3
LAT= 54.0	U= 124.347 / 19.7	V= 130.982 / 1.0	W= 1.681368 / 9.5	T= 70.691 / 14.3
LAT= 60.0	U= 136.141 / 19.4	V= 148.879 / .9	W= 1.243609 / 9.1	T= 50.802 / 14.5
LAT= 66.0	U= 154.522 / 19.2	V= 167.629 / .9	W= 1.010553 / 8.8	T= 37.165 / 14.7
LAT= 72.0	U= 179.423 / 19.0	V= 187.218 / .8	W= .965007 / 8.8	T= 29.557 / 14.9
LAT= 78.0	U= 198.809 / 18.8	V= 206.384 / .7	W= .841493 / 8.9	T= 20.110 / 15.2

Z= 368.753 KM

LAT= 0.0	U= 60.496 / 20.7	V= .010 / 15.7	W= 3.732910 / 9.8	T= 130.010 / 14.6
LAT= 6.0	U= 60.307 / 20.6	V= 15.523 / 23.3	W= 3.680937 / 9.9	T= 132.409 / 14.6
LAT= 12.0	U= 61.249 / 20.4	V= 29.658 / 23.7	W= 3.534892 / 9.9	T= 134.916 / 14.6
LAT= 18.0	U= 63.964 / 20.1	V= 42.190 / .1	W= 3.348081 / 10.1	T= 135.085 / 14.6
LAT= 24.0	U= 70.704 / 20.0	V= 54.865 / .5	W= 3.239793 / 10.1	T= 135.182 / 14.5
LAT= 30.0	U= 80.533 / 20.0	V= 68.611 / .8	W= 3.135558 / 10.0	T= 129.749 / 14.4
LAT= 36.0	U= 93.402 / 20.0	V= 83.770 / 1.0	W= 3.022361 / 10.0	T= 119.405 / 14.4
LAT= 42.0	U= 108.981 / 20.0	V= 100.311 / 1.0	W= 2.867027 / 9.8	T= 110.929 / 14.4
LAT= 48.0	U= 120.548 / 19.8	V= 117.410 / 1.0	W= 2.499432 / 9.6	T= 94.890 / 14.3
LAT= 54.0	U= 128.239 / 19.7	V= 135.037 / 1.0	W= 1.911761 / 9.4	T= 71.709 / 14.4
LAT= 60.0	U= 140.011 / 19.5	V= 153.088 / .9	W= 1.398428 / 9.0	T= 51.526 / 14.6
LAT= 66.0	U= 158.336 / 19.3	V= 172.017 / .9	W= 1.120959 / 8.6	T= 37.643 / 14.7
LAT= 72.0	U= 183.760 / 19.0	V= 191.808 / .8	W= 1.060744 / 8.6	T= 29.940 / 14.9
LAT= 78.0	U= 203.480 / 18.8	V= 211.262 / .7	W= .914214 / 8.7	T= 20.374 / 15.2

Table B1. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 400.753 KM

LAT=	0.0	U=	62.662	20.7	V=	.011	15.7	W=	4.199479	9.8	T=	132.652 / 14.6
LAT=	6.0	U=	62.557	20.5	V=	15.795	23.4	W=	4.147117	9.8	T=	135.058 / 14.6
LAT=	12.0	U=	63.602	20.3	V=	30.249	23.7	W=	3.992508	9.9	T=	137.515 / 14.6
LAT=	18.0	U=	66.170	20.1	V=	43.157	.1	W=	3.789440	10.0	T=	137.575 / 14.6
LAT=	24.0	U=	73.073	20.0	V=	55.943	.6	W=	3.670515	10.0	T=	137.594 / 14.5
LAT=	30.0	U=	83.131	20.0	V=	70.241	.9	W=	3.548609	9.9	T=	132.027 / 14.4
LAT=	36.0	U=	96.289	20.0	V=	86.084	1.0	W=	3.410485	9.9	T=	121.492 / 14.4
LAT=	42.0	U=	112.199	20.0	V=	103.076	1.0	W=	3.231158	9.7	T=	112.881 / 14.4
LAT=	48.0	U=	123.905	19.9	V=	120.563	1.0	W=	2.811204	9.5	T=	96.569 / 14.3
LAT=	54.0	U=	131.550	19.7	V=	138.515	1.0	W=	2.142798	9.3	T=	72.973 / 14.4
LAT=	60.0	U=	143.357	19.5	V=	156.793	.9	W=	1.560270	9.0	T=	52.425 / 14.6
LAT=	66.0	U=	161.911	19.3	V=	175.972	.9	W=	1.237832	8.6	T=	38.292 / 14.7
LAT=	72.0	U=	187.770	19.0	V=	196.035	.8	W=	1.161770	8.6	T=	30.453 / 14.9
LAT=	78.0	U=	207.795	18.8	V=	215.808	.7	W=	.991414	8.6	T=	20.726 / 15.2

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice

Z=	0.000	KM												
LAT=-78.0	U=	.088	/	17.7	V=	.092	/	11.6	W=	.000002	/	9.4	T=	.058 / 20.4
LAT=-72.0	U=	.077	/	18.2	V=	.085	/	11.9	W=	.000005	/	9.4	T=	.079 / 20.5
LAT=-66.0	U=	.068	/	18.5	V=	.078	/	12.2	W=	.000011	/	9.4	T=	.095 / 20.5
LAT=-60.0	U=	.061	/	18.6	V=	.072	/	12.3	W=	.000023	/	9.4	T=	.103 / 20.6
LAT=-54.0	U=	.059	/	18.1	V=	.070	/	12.1	W=	.000043	/	9.4	T=	.106 / 20.7
LAT=-48.0	U=	.048	/	17.5	V=	.069	/	11.7	W=	.000080	/	9.4	T=	.104 / 20.9
LAT=-42.0	U=	.062	/	16.1	V=	.079	/	10.8	W=	.000127	/	9.4	T=	.097 / 21.1
LAT=-36.0	U=	.100	/	15.2	V=	.106	/	10.0	W=	.000167	/	9.4	T=	.084 / 21.4
LAT=-30.0	U=	.133	/	14.9	V=	.147	/	9.4	W=	.000176	/	9.4	T=	.074 / 21.5
LAT=-24.0	U=	.156	/	14.7	V=	.190	/	9.1	W=	.000117	/	9.4	T=	.068 / 21.3
LAT=-18.0	U=	.152	/	14.6	V=	.217	/	9.0	W=	.000034	/	21.3	T=	.069 / 20.7
LAT=-12.0	U=	.115	/	14.6	V=	.198	/	9.0	W=	.000244	/	21.3	T=	.080 / 19.8
LAT= -6.0	U=	.068	/	14.3	V=	.123	/	9.0	W=	.000433	/	21.3	T=	.094 / 19.2
LAT= 0.0	U=	.047	/	14.2	V=	.013	/	10.9	W=	.000510	/	21.3	T=	.099 / 19.0
LAT= 6.0	U=	.062	/	14.4	V=	.103	/	20.5	W=	.000433	/	21.3	T=	.089 / 19.1
LAT= 12.0	U=	.107	/	14.6	V=	.184	/	20.6	W=	.000244	/	21.3	T=	.068 / 19.5
LAT= 18.0	U=	.144	/	14.6	V=	.211	/	20.6	W=	.000034	/	21.3	T=	.049 / 20.5
LAT= 24.0	U=	.155	/	14.5	V=	.190	/	20.7	W=	.000117	/	9.4	T=	.043 / 21.6
LAT= 30.0	U=	.137	/	14.5	V=	.149	/	20.8	W=	.000176	/	9.4	T=	.046 / 22.0
LAT= 36.0	U=	.108	/	14.6	V=	.107	/	21.1	W=	.000167	/	9.4	T=	.054 / 21.7
LAT= 42.0	U=	.075	/	14.8	V=	.073	/	21.6	W=	.000127	/	9.4	T=	.064 / 21.3
LAT= 48.0	U=	.051	/	15.5	V=	.055	/	22.5	W=	.000080	/	9.4	T=	.072 / 21.0
LAT= 54.0	U=	.043	/	16.7	V=	.048	/	23.3	W=	.000043	/	9.4	T=	.077 / 20.8
LAT= 60.0	U=	.040	/	17.6	V=	.048	/	23.8	W=	.000023	/	9.4	T=	.077 / 20.7
LAT= 66.0	U=	.046	/	17.9	V=	.051	/	23.9	W=	.000011	/	9.4	T=	.072 / 20.6
LAT= 72.0	U=	.055	/	18.0	V=	.054	/	24.0	W=	.000005	/	9.4	T=	.060 / 20.6
LAT= 78.0	U=	.064	/	18.0	V=	.060	/	24.0	W=	.000002	/	9.4	T=	.045 / 20.5
Z=	2.078	KM												
LAT=-78.0	U=	.109	/	6.6	V=	.110	/	.6	W=	.000031	/	19.2	T=	.062 / 17.8
LAT=-72.0	U=	.101	/	6.7	V=	.105	/	.7	W=	.000024	/	17.8	T=	.085 / 17.8
LAT=-66.0	U=	.083	/	7.1	V=	.098	/	.7	W=	.000020	/	15.8	T=	.101 / 17.9
LAT=-60.0	U=	.063	/	8.1	V=	.088	/	.9	W=	.000023	/	12.8	T=	.109 / 18.0
LAT=-54.0	U=	.054	/	10.2	V=	.073	/	1.2	W=	.000042	/	10.8	T=	.109 / 18.1
LAT=-48.0	U=	.060	/	11.8	V=	.058	/	2.3	W=	.000081	/	9.8	T=	.104 / 18.0
LAT=-42.0	U=	.087	/	13.4	V=	.054	/	4.7	W=	.000137	/	9.4	T=	.090 / 18.1
LAT=-36.0	U=	.135	/	14.3	V=	.080	/	6.9	W=	.000190	/	9.3	T=	.071 / 18.3
LAT=-30.0	U=	.166	/	14.6	V=	.124	/	8.0	W=	.000211	/	9.3	T=	.059 / 18.4
LAT=-24.0	U=	.183	/	14.8	V=	.168	/	8.4	W=	.000154	/	9.4	T=	.059 / 18.3
LAT=-18.0	U=	.172	/	15.0	V=	.191	/	8.6	W=	.000017	/	17.9	T=	.076 / 18.0
LAT=-12.0	U=	.133	/	15.1	V=	.168	/	8.8	W=	.000248	/	20.9	T=	.105 / 17.8
LAT= -6.0	U=	.090	/	15.3	V=	.094	/	8.9	W=	.000467	/	21.0	T=	.133 / 17.7
LAT= 0.0	U=	.071	/	15.4	V=	.016	/	19.3	W=	.000559	/	21.0	T=	.143 / 17.6
LAT= 6.0	U=	.090	/	15.2	V=	.123	/	20.5	W=	.000477	/	21.0	T=	.126 / 17.7
LAT= 12.0	U=	.134	/	14.9	V=	.194	/	20.6	W=	.000264	/	20.8	T=	.090 / 17.7
LAT= 18.0	U=	.174	/	14.8	V=	.214	/	20.5	W=	.000035	/	19.1	T=	.054 / 17.9
LAT= 24.0	U=	.187	/	14.7	V=	.186	/	20.4	W=	.000138	/	9.5	T=	.030 / 18.3
LAT= 30.0	U=	.170	/	14.6	V=	.138	/	20.1	W=	.000200	/	9.3	T=	.026 / 18.5
LAT= 36.0	U=	.136	/	14.3	V=	.087	/	19.3	W=	.000185	/	9.3	T=	.035 / 18.4
LAT= 42.0	U=	.092	/	13.7	V=	.054	/	17.4	W=	.000139	/	9.3	T=	.051 / 18.2
LAT= 48.0	U=	.059	/	12.4	V=	.050	/	14.8	W=	.000086	/	9.4	T=	.064 / 18.1
LAT= 54.0	U=	.046	/	10.1	V=	.061	/	13.4	W=	.000047	/	10.0	T=	.073 / 18.0
LAT= 60.0	U=	.055	/	8.3	V=	.072	/	12.9	W=	.000027	/	11.3	T=	.076 / 18.0
LAT= 66.0	U=	.067	/	7.4	V=	.080	/	12.7	W=	.000017	/	13.1	T=	.071 / 18.0
LAT= 72.0	U=	.075	/	7.0	V=	.086	/	12.6	W=	.000012	/	15.7	T=	.060 / 18.0
LAT= 78.0	U=	.083	/	6.7	V=	.091	/	12.6	W=	.000012	/	18.6	T=	.044 / 17.9

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 4.161 KM											
LAT=-78.0	U=	.015	18.1	V=	.024	11.6	W=	.000068	13.7	T=	.073 / 17.7
LAT=-72.0	U=	.011	17.4	V=	.022	11.2	W=	.000104	12.9	T=	.102 / 17.8
LAT=-66.0	U=	.016	15.9	V=	.021	10.7	W=	.000135	12.4	T=	.121 / 17.8
LAT=-60.0	U=	.026	15.5	V=	.024	10.1	W=	.000167	11.9	T=	.132 / 17.9
LAT=-54.0	U=	.043	15.5	V=	.032	9.6	W=	.000209	11.3	T=	.132 / 17.9
LAT=-48.0	U=	.050	14.9	V=	.048	9.2	W=	.000274	10.6	T=	.126 / 17.9
LAT=-42.0	U=	.073	14.7	V=	.072	9.0	W=	.000364	10.0	T=	.109 / 17.9
LAT=-36.0	U=	.110	14.8	V=	.106	8.8	W=	.000448	9.7	T=	.085 / 18.2
LAT=-30.0	U=	.129	14.8	V=	.147	8.8	W=	.000469	9.6	T=	.072 / 18.3
LAT=-24.0	U=	.138	14.7	V=	.182	8.8	W=	.000346	9.8	T=	.073 / 18.1
LAT=-18.0	U=	.123	14.7	V=	.198	8.7	W=	.000087	14.6	T=	.097 / 17.8
LAT=-12.0	U=	.086	14.7	V=	.173	8.7	W=	.000466	20.1	T=	.139 / 17.5
LAT= -6.0	U=	.047	14.7	V=	.105	8.8	W=	.000879	20.4	T=	.180 / 17.4
LAT= 0.0	U=	.030	14.6	V=	.008	10.5	W=	.001052	20.5	T=	.193 / 17.4
LAT= 6.0	U=	.047	14.6	V=	.090	20.5	W=	.000889	20.5	T=	.170 / 17.4
LAT= 12.0	U=	.084	14.6	V=	.157	20.6	W=	.000482	20.2	T=	.121 / 17.5
LAT= 18.0	U=	.118	14.6	V=	.180	20.6	W=	.000076	15.7	T=	.071 / 17.8
LAT= 24.0	U=	.130	14.7	V=	.162	20.6	W=	.000320	9.7	T=	.039 / 18.4
LAT= 30.0	U=	.118	14.7	V=	.125	20.6	W=	.000444	9.5	T=	.033 / 18.8
LAT= 36.0	U=	.093	14.7	V=	.085	20.6	W=	.000426	9.5	T=	.043 / 18.5
LAT= 42.0	U=	.060	14.6	V=	.051	20.6	W=	.000344	9.8	T=	.063 / 18.2
LAT= 48.0	U=	.035	14.6	V=	.028	20.7	W=	.000253	10.2	T=	.081 / 18.0
LAT= 54.0	U=	.019	14.9	V=	.015	21.1	W=	.000185	10.9	T=	.092 / 17.9
LAT= 60.0	U=	.009	14.4	V=	.011	22.3	W=	.000148	11.6	T=	.096 / 17.9
LAT= 66.0	U=	.006	15.3	V=	.011	23.6	W=	.000119	12.1	T=	.090 / 17.9
LAT= 72.0	U=	.008	17.6	V=	.013	.1	W=	.000089	12.4	T=	.076 / 17.9
LAT= 78.0	U=	.012	18.4	V=	.015	.4	W=	.000057	12.8	T=	.055 / 17.9
Z= 9.525 KM											
LAT=-78.0	U=	.151	18.3	V=	.175	12.2	W=	.000211	12.2	T=	.073 / 17.9
LAT=-72.0	U=	.131	18.3	V=	.165	12.2	W=	.000306	12.1	T=	.101 / 17.9
LAT=-66.0	U=	.118	18.2	V=	.151	12.2	W=	.000374	11.9	T=	.121 / 17.9
LAT=-60.0	U=	.099	18.1	V=	.137	12.2	W=	.000437	11.5	T=	.131 / 18.0
LAT=-54.0	U=	.072	17.8	V=	.121	12.2	W=	.000508	11.0	T=	.130 / 18.2
LAT=-48.0	U=	.018	18.1	V=	.099	12.3	W=	.000586	10.3	T=	.123 / 18.3
LAT=-42.0	U=	.039	5.8	V=	.069	12.7	W=	.000706	9.6	T=	.107 / 18.7
LAT=-36.0	U=	.093	6.0	V=	.030	14.4	W=	.000816	9.2	T=	.087 / 19.4
LAT=-30.0	U=	.146	6.0	V=	.032	20.7	W=	.000830	9.0	T=	.074 / 19.6
LAT=-24.0	U=	.179	5.9	V=	.073	22.3	W=	.000618	9.3	T=	.073 / 19.0
LAT=-18.0	U=	.175	5.9	V=	.101	22.6	W=	.000265	13.7	T=	.100 / 17.7
LAT=-12.0	U=	.137	5.9	V=	.093	22.7	W=	.000837	18.3	T=	.156 / 16.7
LAT= -6.0	U=	.091	5.9	V=	.047	22.4	W=	.001518	18.8	T=	.210 / 16.4
LAT= 0.0	U=	.074	6.0	V=	.028	12.1	W=	.001803	19.0	T=	.232 / 16.2
LAT= 6.0	U=	.097	6.0	V=	.101	11.3	W=	.001523	18.9	T=	.202 / 16.3
LAT= 12.0	U=	.149	5.9	V=	.148	11.1	W=	.000843	18.5	T=	.140 / 16.6
LAT= 18.0	U=	.193	5.9	V=	.155	11.1	W=	.000210	14.3	T=	.076 / 17.6
LAT= 24.0	U=	.202	5.9	V=	.126	11.0	W=	.000553	9.0	T=	.045 / 20.0
LAT= 30.0	U=	.175	5.9	V=	.081	10.7	W=	.000766	8.6	T=	.045 / 21.1
LAT= 36.0	U=	.130	5.9	V=	.036	9.9	W=	.000749	8.8	T=	.052 / 20.3
LAT= 42.0	U=	.073	5.9	V=	.018	2.8	W=	.000632	9.2	T=	.067 / 19.2
LAT= 48.0	U=	.022	5.8	V=	.047	.7	W=	.000502	9.9	T=	.083 / 18.5
LAT= 54.0	U=	.021	18.3	V=	.073	.4	W=	.000412	10.7	T=	.094 / 18.2
LAT= 60.0	U=	.050	18.2	V=	.093	.3	W=	.000363	11.3	T=	.096 / 18.0
LAT= 66.0	U=	.077	18.2	V=	.109	.2	W=	.000312	11.7	T=	.090 / 17.9
LAT= 72.0	U=	.103	18.2	V=	.123	.2	W=	.000247	11.9	T=	.075 / 17.9
LAT= 78.0	U=	.120	18.1	V=	.133	.2	W=	.000172	12.1	T=	.055 / 17.9

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 14.879 KM											
LAT=-78.0	U=	.203 / 18.2	V=	.226 / 12.1	W=	.000309 / 12.0	T=	.006 / 17.7
LAT=-72.0	U=	.178 / 18.3	V=	.212 / 12.1	W=	.000430 / 11.9	T=	.008 / 18.2
LAT=-66.0	U=	.149 / 18.3	V=	.193 / 12.2	W=	.000497 / 11.8	T=	.011 / 19.4
LAT=-60.0	U=	.118 / 18.6	V=	.169 / 12.4	W=	.000541 / 11.4	T=	.014 / 21.0
LAT=-54.0	U=	.081 / 19.6	V=	.138 / 12.9	W=	.000576 / 10.8	T=	.021 / 23.0
LAT=-48.0	U=	.072 / .9	V=	.101 / 14.4	W=	.000567 / 9.4	T=	.037 / 22.6
LAT=-42.0	U=	.165 / 3.0	V=	.110 / 17.9	W=	.000648 / 8.0	T=	.057 / 23.0
LAT=-36.0	U=	.278 / 3.5	V=	.212 / 20.0	W=	.000772 / 7.0	T=	.075 / 23.5
LAT=-30.0	U=	.380 / 3.7	V=	.349 / 20.7	W=	.000796 / 6.7	T=	.079 / 23.5
LAT=-24.0	U=	.439 / 3.8	V=	.481 / 21.0	W=	.000559 / 7.4	T=	.053 / 23.3
LAT=-18.0	U=	.411 / 3.8	V=	.553 / 21.1	W=	.000458 / 13.3	T=	.018 / 14.3
LAT=-12.0	U=	.307 / 3.9	V=	.493 / 21.1	W=	.001352 / 15.6	T=	.108 / 12.4
LAT= -6.0	U=	.190 / 4.1	V=	.286 / 21.1	W=	.002244 / 16.0	T=	.192 / 12.2
LAT= 0.0	U=	.141 / 4.3	V=	.027 / 12.0	W=	.002608 / 16.1	T=	.226 / 12.2
LAT= 6.0	U=	.195 / 4.2	V=	.329 / 9.5	W=	.002227 / 16.0	T=	.192 / 12.2
LAT= 12.0	U=	.318 / 4.0	V=	.537 / 9.4	W=	.001319 / 15.7	T=	.108 / 12.4
LAT= 18.0	U=	.429 / 3.9	V=	.599 / 9.4	W=	.000381 / 13.6	T=	.018 / 14.3
LAT= 24.0	U=	.462 / 3.9	V=	.527 / 9.3	W=	.000531 / 6.7	T=	.053 / 23.3
LAT= 30.0	U=	.411 / 3.8	V=	.394 / 9.2	W=	.000788 / 6.1	T=	.079 / 23.5
LAT= 36.0	U=	.318 / 3.8	V=	.251 / 8.8	W=	.000749 / 6.4	T=	.075 / 23.5
LAT= 42.0	U=	.198 / 3.6	V=	.129 / 7.9	W=	.000597 / 7.3	T=	.057 / 23.2
LAT= 48.0	U=	.097 / 2.9	V=	.066 / 5.0	W=	.000472 / 8.8	T=	.038 / 22.8
LAT= 54.0	U=	.039 / 23.4	V=	.079 / 1.7	W=	.000437 / 10.3	T=	.022 / 21.9
LAT= 60.0	U=	.061 / 19.3	V=	.113 / .6	W=	.000436 / 11.2	T=	.016 / 20.7
LAT= 66.0	U=	.098 / 18.4	V=	.139 / .3	W=	.000408 / 11.6	T=	.013 / 19.6
LAT= 72.0	U=	.131 / 18.2	V=	.160 / .2	W=	.000336 / 11.8	T=	.010 / 18.8
LAT= 78.0	U=	.156 / 18.1	V=	.176 / .2	W=	.000242 / 11.9	T=	.008 / 18.5
Z= 20.239 KM											
LAT=-78.0	U=	.237 / 18.1	V=	.269 / 12.1	W=	.000389 / 12.1	T=	.011 / 17.1
LAT=-72.0	U=	.212 / 18.3	V=	.255 / 12.2	W=	.000524 / 12.1	T=	.018 / 17.2
LAT=-66.0	U=	.203 / 18.7	V=	.243 / 12.4	W=	.000564 / 12.2	T=	.032 / 17.2
LAT=-60.0	U=	.213 / 19.2	V=	.241 / 12.7	W=	.000566 / 12.3	T=	.043 / 17.5
LAT=-54.0	U=	.258 / 19.8	V=	.261 / 13.3	W=	.000516 / 12.4	T=	.055 / 18.0
LAT=-48.0	U=	.332 / 20.9	V=	.321 / 14.0	W=	.000240 / 14.2	T=	.114 / 17.7
LAT=-42.0	U=	.490 / 21.5	V=	.447 / 14.7	W=	.000260 / 20.5	T=	.172 / 17.7
LAT=-36.0	U=	.702 / 21.7	V=	.653 / 15.2	W=	.000531 / 22.0	T=	.208 / 17.8
LAT=-30.0	U=	.860 / 21.8	V=	.897 / 15.4	W=	.000661 / 22.3	T=	.221 / 17.8
LAT=-24.0	U=	.937 / 21.9	V=	1.120 / 15.6	W=	.000340 / 21.8	T=	.152 / 17.8
LAT=-18.0	U=	.844 / 22.0	V=	1.223 / 15.6	W=	.000653 / 11.7	T=	.025 / 6.1
LAT=-12.0	U=	.595 / 22.1	V=	1.073 / 15.7	W=	.002015 / 11.3	T=	.269 / 5.9
LAT= -6.0	U=	.330 / 22.3	V=	.642 / 15.6	W=	.003251 / 11.3	T=	.488 / 5.9
LAT= 0.0	U=	.214 / 22.5	V=	.035 / 11.9	W=	.003751 / 11.2	T=	.579 / 5.9
LAT= 6.0	U=	.327 / 22.3	V=	.606 / 4.0	W=	.003223 / 11.2	T=	.492 / 5.9
LAT= 12.0	U=	.588 / 22.2	V=	1.036 / 3.9	W=	.001960 / 11.3	T=	.277 / 5.9
LAT= 18.0	U=	.833 / 22.1	V=	1.184 / 3.8	W=	.000572 / 11.7	T=	.037 / 6.0
LAT= 24.0	U=	.919 / 22.0	V=	1.076 / 3.8	W=	.000427 / 22.3	T=	.136 / 17.8
LAT= 30.0	U=	.836 / 22.0	V=	.849 / 3.7	W=	.000772 / 22.6	T=	.204 / 17.8
LAT= 36.0	U=	.670 / 22.0	V=	.602 / 3.6	W=	.000659 / 22.4	T=	.194 / 17.8
LAT= 42.0	U=	.454 / 21.9	V=	.389 / 3.2	W=	.000353 / 21.7	T=	.151 / 17.8
LAT= 48.0	U=	.285 / 21.6	V=	.254 / 2.6	W=	.000140 / 16.8	T=	.101 / 17.8
LAT= 54.0	U=	.184 / 20.8	V=	.190 / 1.8	W=	.000307 / 13.0	T=	.062 / 17.8
LAT= 60.0	U=	.140 / 19.7	V=	.172 / 1.0	W=	.000421 / 12.4	T=	.042 / 17.8
LAT= 66.0	U=	.140 / 18.8	V=	.178 / .5	W=	.000440 / 12.2	T=	.030 / 17.8
LAT= 72.0	U=	.162 / 18.4	V=	.193 / .3	W=	.000376 / 12.1	T=	.024 / 17.6
LAT= 78.0	U=	.184 / 18.2	V=	.208 / .2	W=	.000275 / 12.1	T=	.017 / 17.6

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 25.607 KM

LAT=-78.0	U=	.292	18.1	V=	.318	12.0	W=	.000641	12.2	T=	.029 / 16.9
LAT=-72.0	U=	.270	18.1	V=	.306	12.0	W=	.000887	12.2	T=	.042 / 16.8
LAT=-66.0	U=	.243	17.8	V=	.299	11.9	W=	.001032	12.4	T=	.063 / 16.4
LAT=-60.0	U=	.280	17.3	V=	.314	11.8	W=	.001200	12.7	T=	.062 / 15.3
LAT=-54.0	U=	.404	16.8	V=	.368	11.5	W=	.001402	13.0	T=	.066 / 12.4
LAT=-48.0	U=	.496	16.5	V=	.485	11.3	W=	.001487	14.0	T=	.141 / 12.4
LAT=-42.0	U=	.719	16.2	V=	.692	11.1	W=	.001734	14.9	T=	.220 / 11.8
LAT=-36.0	U=	1.044	16.1	V=	1.003	10.9	W=	.001985	15.3	T=	.285 / 11.1
LAT=-30.0	U=	1.259	16.0	V=	1.362	10.8	W=	.001983	15.6	T=	.303 / 11.1
LAT=-24.0	U=	1.362	16.0	V=	1.690	10.8	W=	.001430	15.2	T=	.200 / 11.4
LAT=-18.0	U=	1.225	15.9	V=	1.842	10.7	W=	.000684	10.1	T=	.093 / 20.4
LAT=-12.0	U=	.859	15.9	V=	1.616	10.7	W=	.002264	6.3	T=	.463 / 22.0
LAT= -6.0	U=	.468	15.8	V=	.976	10.8	W=	.003994	5.9	T=	.803 / 22.2
LAT= 0.0	U=	.298	15.6	V=	.056	12.0	W=	.004711	5.8	T=	.941 / 22.2
LAT= 6.0	U=	.458	15.7	V=	.870	22.6	W=	.003995	5.8	T=	.797 / 22.2
LAT= 12.0	U=	.837	15.8	V=	1.508	22.6	W=	.002258	6.2	T=	.451 / 22.2
LAT= 18.0	U=	1.187	15.9	V=	1.730	22.7	W=	.000594	9.8	T=	.068 / 21.7
LAT= 24.0	U=	1.311	15.9	V=	1.574	22.7	W=	.001346	15.5	T=	.210 / 10.6
LAT= 30.0	U=	1.191	15.9	V=	1.245	22.7	W=	.001889	15.9	T=	.316 / 10.5
LAT= 36.0	U=	.952	15.9	V=	.887	22.8	W=	.001853	15.7	T=	.297 / 10.6
LAT= 42.0	U=	.643	15.9	V=	.577	22.9	W=	.001565	15.2	T=	.221 / 10.8
LAT= 48.0	U=	.402	16.0	V=	.376	23.1	W=	.001250	14.4	T=	.136 / 11.4
LAT= 54.0	U=	.258	16.4	V=	.272	23.4	W=	.001034	13.5	T=	.075 / 12.9
LAT= 60.0	U=	.191	17.0	V=	.232	23.7	W=	.000912	12.8	T=	.057 / 15.2
LAT= 66.0	U=	.178	17.5	V=	.228	23.9	W=	.000780	12.5	T=	.057 / 16.7
LAT= 72.0	U=	.198	17.8	V=	.242	0.0	W=	.000610	12.3	T=	.056 / 17.3
LAT= 78.0	U=	.227	18.0	V=	.261	.1	W=	.000426	12.2	T=	.045 / 17.6

Z= 30.985 KM

LAT=-78.0	U=	.439	17.8	V=	.503	11.9	W=	.001156	12.1	T=	.094 / 17.7
LAT=-72.0	U=	.375	17.7	V=	.467	11.8	W=	.001633	12.0	T=	.128 / 17.7
LAT=-66.0	U=	.294	17.4	V=	.423	11.5	W=	.002005	12.0	T=	.153 / 17.8
LAT=-60.0	U=	.278	16.1	V=	.387	10.9	W=	.002462	11.9	T=	.119 / 18.2
LAT=-54.0	U=	.392	14.3	V=	.382	9.7	W=	.003044	11.8	T=	.043 / 22.4
LAT=-48.0	U=	.539	11.8	V=	.477	7.9	W=	.003435	11.9	T=	.053 / 2.9
LAT=-42.0	U=	.943	10.9	V=	.770	6.4	W=	.004037	11.9	T=	.181 / 4.6
LAT=-36.0	U=	1.462	10.7	V=	1.274	5.6	W=	.004590	11.8	T=	.349 / 4.8
LAT=-30.0	U=	1.861	10.5	V=	1.871	5.3	W=	.004505	11.8	T=	.382 / 4.9
LAT=-24.0	U=	2.073	10.4	V=	2.428	5.1	W=	.003305	11.8	T=	.209 / 4.7
LAT=-18.0	U=	1.900	10.4	V=	2.710	5.1	W=	.000582	12.3	T=	.256 / 17.5
LAT=-12.0	U=	1.372	10.3	V=	2.386	5.1	W=	.003105	23.5	T=	.904 / 17.2
LAT= -6.0	U=	.798	10.1	V=	1.407	5.2	W=	.006366	23.6	T=	1.486 / 17.2
LAT= 0.0	U=	.553	9.9	V=	.123	11.8	W=	.007711	23.6	T=	1.712 / 17.2
LAT= 6.0	U=	.811	10.0	V=	1.468	16.5	W=	.006408	23.6	T=	1.446 / 17.2
LAT= 12.0	U=	1.397	10.1	V=	2.447	16.7	W=	.003195	23.5	T=	.830 / 17.2
LAT= 18.0	U=	1.937	10.2	V=	2.769	16.7	W=	.000437	12.4	T=	.151 / 17.4
LAT= 24.0	U=	2.126	10.2	V=	2.488	16.8	W=	.003096	11.8	T=	.333 / 5.1
LAT= 30.0	U=	1.926	10.2	V=	1.926	16.8	W=	.004210	11.8	T=	.511 / 5.1
LAT= 36.0	U=	1.534	10.2	V=	1.311	16.9	W=	.004185	11.8	T=	.464 / 5.1
LAT= 42.0	U=	1.021	10.2	V=	.771	17.2	W=	.003615	11.8	T=	.310 / 4.9
LAT= 48.0	U=	.593	10.3	V=	.412	18.1	W=	.002881	11.8	T=	.138 / 4.5
LAT= 54.0	U=	.296	11.1	V=	.248	20.2	W=	.002243	11.9	T=	.031 / 22.2
LAT= 60.0	U=	.159	13.8	V=	.251	22.5	W=	.001822	11.9	T=	.095 / 18.5
LAT= 66.0	U=	.191	16.7	V=	.310	23.5	W=	.001449	11.9	T=	.133 / 18.1
LAT= 72.0	U=	.270	17.6	V=	.371	23.9	W=	.001083	11.9	T=	.140 / 17.9
LAT= 78.0	U=	.351	17.9	V=	.422	23.9	W=	.000731	11.9	T=	.114 / 17.9

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 36.378 KM

LAT=-78.0	U=	.716	18.1	V=	.802	11.9	W=	.002024	12.0	T=	.238 / 17.8
LAT=-72.0	U=	.602	18.3	V=	.734	12.0	W=	.002796	11.9	T=	.336 / 17.9
LAT=-66.0	U=	.394	18.4	V=	.630	12.0	W=	.003339	11.7	T=	.426 / 18.2
LAT=-60.0	U=	.246	18.4	V=	.493	12.0	W=	.003744	11.4	T=	.455 / 18.8
LAT=-54.0	U=	.109	17.9	V=	.279	12.3	W=	.004035	11.0	T=	.451 / 19.9
LAT=-48.0	U=	.545	5.3	V=	.105	22.4	W=	.003671	10.1	T=	.607 / 20.3
LAT=-42.0	U=	1.274	5.5	V=	.709	23.5	W=	.003681	8.9	T=	.758 / 21.1
LAT=-36.0	U=	2.023	5.6	V=	1.588	23.7	W=	.004012	7.9	T=	.890 / 21.9
LAT=-30.0	U=	2.693	5.6	V=	2.574	23.7	W=	.003959	7.4	T=	.910 / 22.0
LAT=-24.0	U=	3.060	5.6	V=	3.481	23.7	W=	.002879	8.1	T=	.661 / 21.5
LAT=-18.0	U=	2.831	5.6	V=	3.950	23.7	W=	.002443	13.1	T=	.382 / 16.2
LAT=-12.0	U=	2.075	5.6	V=	3.474	23.7	W=	.006323	15.5	T=	1.167 / 12.9
LAT= -6.0	U=	1.243	5.6	V=	1.964	23.7	W=	.010359	16.0	T=	2.006 / 12.4
LAT= 0.0	U=	.897	5.6	V=	.255	11.9	W=	.012035	16.1	T=	2.349 / 12.3
LAT= 6.0	U=	1.301	5.6	V=	2.473	11.7	W=	.010337	16.0	T=	1.991 / 12.2
LAT= 12.0	U=	2.197	5.6	V=	3.983	11.7	W=	.006255	15.6	T=	1.125 / 12.3
LAT= 18.0	U=	3.021	5.6	V=	4.456	11.7	W=	.002240	13.2	T=	.179 / 14.0
LAT= 24.0	U=	3.313	5.6	V=	3.980	11.7	W=	.002712	7.6	T=	.551 / 23.3
LAT= 30.0	U=	3.015	5.6	V=	3.054	11.7	W=	.003794	6.9	T=	.819 / 23.4
LAT= 36.0	U=	2.419	5.6	V=	2.037	11.7	W=	.003685	7.2	T=	.783 / 23.1
LAT= 42.0	U=	1.622	5.6	V=	1.119	11.7	W=	.003118	8.1	T=	.622 / 22.6
LAT= 48.0	U=	.930	5.6	V=	.455	11.5	W=	.002653	9.3	T=	.461 / 21.5
LAT= 54.0	U=	.402	5.5	V=	.035	6.8	W=	.002460	10.5	T=	.385 / 20.0
LAT= 60.0	U=	.034	3.2	V=	.282	.2	W=	.002340	11.2	T=	.376 / 19.0
LAT= 66.0	U=	.238	18.1	V=	.473	0.0	W=	.002092	11.6	T=	.363 / 18.4
LAT= 72.0	U=	.439	18.1	V=	.612	0.0	W=	.001677	11.7	T=	.326 / 18.1
LAT= 78.0	U=	.595	18.0	V=	.714	24.0	W=	.001160	11.8	T=	.252 / 18.0

Z= 41.789 KM

LAT=-78.0	U=	1.604	18.0	V=	1.856	12.0	W=	.003723	11.9	T=	.783 / 17.9
LAT=-72.0	U=	1.364	18.2	V=	1.726	12.1	W=	.005087	11.9	T=	1.109 / 17.9
LAT=-66.0	U=	1.090	18.6	V=	1.577	12.2	W=	.006044	11.9	T=	1.363 / 17.9
LAT=-60.0	U=	.973	19.1	V=	1.448	12.5	W=	.006315	11.8	T=	1.534 / 18.1
LAT=-54.0	U=	1.010	19.6	V=	1.360	13.1	W=	.005798	11.5	T=	1.642 / 18.4
LAT=-48.0	U=	1.028	22.8	V=	1.381	14.2	W=	.003493	10.8	T=	2.012 / 18.4
LAT=-42.0	U=	1.674	.4	V=	1.698	15.7	W=	.001661	6.8	T=	2.312 / 18.6
LAT=-36.0	U=	2.470	.8	V=	2.443	16.8	W=	.003152	2.9	T=	2.446 / 18.8
LAT=-30.0	U=	3.189	1.1	V=	3.428	17.4	W=	.004275	2.1	T=	2.407 / 18.9
LAT=-24.0	U=	3.572	1.2	V=	4.372	17.7	W=	.002028	3.2	T=	1.883 / 18.7
LAT=-18.0	U=	3.271	1.3	V=	4.845	17.9	W=	.005834	12.2	T=	.768 / 17.2
LAT=-12.0	U=	2.370	1.4	V=	4.268	17.8	W=	.016477	12.7	T=	1.103 / 9.4
LAT= -6.0	U=	1.397	1.7	V=	2.555	17.4	W=	.026192	12.8	T=	2.497 / 8.4
LAT= 0.0	U=	1.007	2.2	V=	.692	12.0	W=	.030139	12.8	T=	3.140 / 8.2
LAT= 6.0	U=	1.476	2.1	V=	2.722	7.4	W=	.026006	12.8	T=	2.671 / 8.2
LAT= 12.0	U=	2.503	1.9	V=	4.422	7.0	W=	.016059	12.7	T=	1.391 / 8.4
LAT= 18.0	U=	3.453	1.8	V=	4.966	6.9	W=	.005130	12.3	T=	.204 / 15.6
LAT= 24.0	U=	3.786	1.8	V=	4.456	6.8	W=	.002840	2.1	T=	1.204 / 19.2
LAT= 30.0	U=	3.437	1.8	V=	3.445	6.6	W=	.005586	1.6	T=	1.681 / 19.3
LAT= 36.0	U=	2.744	1.8	V=	2.346	6.4	W=	.004793	1.8	T=	1.720 / 19.2
LAT= 42.0	U=	1.819	1.8	V=	1.408	5.7	W=	.002541	2.6	T=	1.570 / 19.0
LAT= 48.0	U=	1.034	1.4	V=	.877	4.0	W=	.001179	7.8	T=	1.368 / 18.7
LAT= 54.0	U=	.518	23.7	V=	.806	1.9	W=	.002463	11.1	T=	1.220 / 18.4
LAT= 60.0	U=	.497	20.0	V=	.971	.7	W=	.003227	11.5	T=	1.124 / 18.2
LAT= 66.0	U=	.763	18.5	V=	1.169	.2	W=	.003316	11.7	T=	1.008 / 18.1
LAT= 72.0	U=	1.040	18.1	V=	1.351	0.0	W=	.002840	11.9	T=	.856 / 17.9
LAT= 78.0	U=	1.286	18.0	V=	1.505	24.0	W=	.002013	11.9	T=	.638 / 17.9

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 47.224 KM											
LAT=-78.0	U=	3.978	18.0	V=	4.606	11.9	W=	.006866	12.0	T=	1.595 / 17.8
LAT=-72.0	U=	3.459	18.1	V=	4.323	11.9	W=	.009424	12.0	T=	2.234 / 17.8
LAT=-66.0	U=	3.053	18.2	V=	4.059	12.0	W=	.011343	12.0	T=	2.702 / 17.8
LAT=-60.0	U=	2.970	18.2	V=	3.909	12.1	W=	.012257	12.1	T=	2.984 / 17.7
LAT=-54.0	U=	3.302	18.2	V=	3.956	12.1	W=	.012092	12.4	T=	3.098 / 17.7
LAT=-48.0	U=	3.295	18.7	V=	4.319	12.3	W=	.010137	13.2	T=	3.458 / 17.4
LAT=-42.0	U=	4.036	19.0	V=	5.148	12.4	W=	.008303	14.5	T=	3.681 / 17.2
LAT=-36.0	U=	5.357	19.0	V=	6.514	12.6	W=	.007403	16.1	T=	3.665 / 17.0
LAT=-30.0	U=	6.215	19.2	V=	8.159	12.7	W=	.007148	17.1	T=	3.490 / 16.9
LAT=-24.0	U=	6.570	19.2	V=	9.680	12.7	W=	.005588	15.6	T=	2.817 / 17.0
LAT=-18.0	U=	5.817	19.2	V=	10.365	12.8	W=	.009612	11.3	T=	1.561 / 18.3
LAT=-12.0	U=	3.986	19.3	V=	9.216	12.8	W=	.021428	10.1	T=	1.230 / 23.8
LAT= -6.0	U=	2.023	19.5	V=	6.021	12.7	W=	.032739	9.8	T=	2.555 / 1.9
LAT= 0.0	U=	1.092	19.9	V=	1.455	11.9	W=	.037250	9.7	T=	3.242 / 2.4
LAT= 6.0	U=	1.718	19.8	V=	3.272	1.4	W=	.032053	9.7	T=	2.720 / 2.3
LAT= 12.0	U=	3.393	19.6	V=	6.559	1.1	W=	.019953	10.0	T=	1.342 / 1.4
LAT= 18.0	U=	4.969	19.5	V=	7.864	1.1	W=	.007137	11.2	T=	.773 / 18.7
LAT= 24.0	U=	5.542	19.5	V=	7.365	1.0	W=	.004848	18.0	T=	1.858 / 16.6
LAT= 30.0	U=	5.042	19.5	V=	6.037	1.0	W=	.007609	19.2	T=	2.429 / 16.4
LAT= 36.0	U=	4.067	19.4	V=	4.591	.9	W=	.006813	18.7	T=	2.546 / 16.5
LAT= 42.0	U=	2.847	19.4	V=	3.390	.7	W=	.005161	17.0	T=	2.460 / 16.8
LAT= 48.0	U=	2.004	19.1	V=	2.713	.4	W=	.004971	14.5	T=	2.302 / 17.2
LAT= 54.0	U=	1.676	18.7	V=	2.489	.2	W=	.006031	13.0	T=	2.178 / 17.5
LAT= 60.0	U=	1.765	18.2	V=	2.548	.1	W=	.006618	12.4	T=	2.055 / 17.6
LAT= 66.0	U=	2.061	18.0	V=	2.740	24.0	W=	.006406	12.1	T=	1.858 / 17.7
LAT= 72.0	U=	2.452	18.0	V=	2.979	24.0	W=	.005418	12.0	T=	1.566 / 17.8
LAT= 78.0	U=	2.832	18.0	V=	3.215	23.9	W=	.003856	11.9	T=	1.156 / 17.8
Z= 52.691 KM											
LAT=-78.0	U=	7.026	17.9	V=	7.942	11.8	W=	.010397	11.9	T=	1.687 / 17.7
LAT=-72.0	U=	6.185	18.0	V=	7.470	11.8	W=	.014366	11.9	T=	2.325 / 17.7
LAT=-66.0	U=	5.323	17.9	V=	6.978	11.9	W=	.017693	12.0	T=	2.758 / 17.7
LAT=-60.0	U=	4.927	17.7	V=	6.592	11.8	W=	.020142	12.1	T=	2.911 / 17.6
LAT=-54.0	U=	5.123	17.4	V=	6.419	11.6	W=	.021842	12.3	T=	2.783 / 17.5
LAT=-48.0	U=	5.751	17.2	V=	6.595	11.4	W=	.022787	12.7	T=	2.779 / 17.0
LAT=-42.0	U=	5.345	16.8	V=	7.324	11.1	W=	.023936	13.2	T=	2.611 / 16.4
LAT=-36.0	U=	6.781	16.5	V=	8.717	10.8	W=	.024620	13.6	T=	2.323 / 15.6
LAT=-30.0	U=	7.619	16.4	V=	10.482	10.5	W=	.023420	13.8	T=	2.116 / 15.2
LAT=-24.0	U=	7.898	16.3	V=	12.130	10.4	W=	.018518	13.5	T=	1.776 / 15.8
LAT=-18.0	U=	6.886	16.2	V=	12.787	10.3	W=	.010904	11.1	T=	1.744 / 18.4
LAT=-12.0	U=	4.608	16.1	V=	11.223	10.3	W=	.015995	6.6	T=	2.861 / 20.6
LAT= -6.0	U=	2.217	15.7	V=	7.197	10.4	W=	.028064	5.4	T=	4.208 / 21.3
LAT= 0.0	U=	1.133	14.9	V=	1.613	11.9	W=	.033517	5.1	T=	4.764 / 21.5
LAT= 6.0	U=	1.902	15.3	V=	4.400	21.3	W=	.028352	5.1	T=	4.117 / 21.4
LAT= 12.0	U=	3.957	15.8	V=	8.446	21.7	W=	.015706	5.8	T=	2.642 / 20.8
LAT= 18.0	U=	5.927	15.9	V=	10.064	21.8	W=	.006154	10.5	T=	1.305 / 18.6
LAT= 24.0	U=	6.693	16.0	V=	9.463	21.9	W=	.013111	14.2	T=	1.296 / 14.9
LAT= 30.0	U=	6.158	16.0	V=	7.850	22.0	W=	.017462	14.5	T=	1.624 / 14.1
LAT= 36.0	U=	5.044	16.1	V=	6.098	22.3	W=	.017783	14.3	T=	1.694 / 14.6
LAT= 42.0	U=	3.639	16.2	V=	4.679	22.6	W=	.016364	13.8	T=	1.713 / 15.5
LAT= 48.0	U=	2.709	16.6	V=	3.933	23.1	W=	.014609	13.2	T=	1.787 / 16.5
LAT= 54.0	U=	2.435	17.1	V=	3.762	23.5	W=	.013336	12.7	T=	1.890 / 17.2
LAT= 60.0	U=	2.694	17.6	V=	3.942	23.7	W=	.012362	12.3	T=	1.894 / 17.5
LAT= 66.0	U=	3.205	17.8	V=	4.275	23.8	W=	.010951	12.1	T=	1.767 / 17.7
LAT= 72.0	U=	3.840	17.9	V=	4.657	23.8	W=	.008937	12.0	T=	1.507 / 17.8
LAT= 78.0	U=	4.433	17.9	V=	5.018	23.8	W=	.006327	11.9	T=	1.116 / 17.8

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 58.200 KM

LAT=-78.0	U=	9.320	/ 17.8	V=	10.612	/ 11.8	W=	.012734	/ 11.9	T=	1.244 / 17.9
LAT=-72.0	U=	8.068	/ 17.8	V=	9.899	/ 11.8	W=	.017555	/ 11.9	T=	1.665 / 17.8
LAT=-66.0	U=	6.817	/ 17.8	V=	9.091	/ 11.8	W=	.021862	/ 11.9	T=	1.874 / 17.7
LAT=-60.0	U=	5.786	/ 17.5	V=	8.263	/ 11.7	W=	.025416	/ 11.9	T=	1.820 / 17.8
LAT=-54.0	U=	5.073	/ 16.7	V=	7.422	/ 11.4	W=	.028482	/ 11.9	T=	1.482 / 18.0
LAT=-48.0	U=	3.616	/ 15.1	V=	6.629	/ 10.8	W=	.031944	/ 11.9	T=	1.142 / 17.8
LAT=-42.0	U=	4.142	/ 12.7	V=	6.195	/ 9.8	W=	.035728	/ 11.9	T=	.542 / 17.6
LAT=-36.0	U=	6.318	/ 11.5	V=	6.709	/ 8.4	W=	.038175	/ 12.0	T=	.171 / 5.2
LAT=-30.0	U=	8.133	/ 10.9	V=	8.247	/ 7.2	W=	.036893	/ 12.0	T=	.466 / 5.6
LAT=-24.0	U=	9.201	/ 10.6	V=	10.089	/ 6.5	W=	.028307	/ 12.0	T=	.076 / 4.9
LAT=-18.0	U=	8.565	/ 10.4	V=	11.059	/ 6.2	W=	.009775	/ 11.8	T=	1.250 / 17.8
LAT=-12.0	U=	6.341	/ 10.1	V=	9.721	/ 6.1	W=	.014932	/ .3	T=	3.213 / 17.8
LAT= -6.0	U=	3.939	/ 9.5	V=	5.796	/ 6.3	W=	.036916	/ .2	T=	5.007 / 17.8
LAT= 0.0	U=	2.990	/ 9.0	V=	1.235	/ 11.9	W=	.046637	/ .1	T=	5.744 / 17.8
LAT= 6.0	U=	4.097	/ 9.3	V=	6.026	/ 16.7	W=	.039292	/ .1	T=	4.986 / 17.8
LAT= 12.0	U=	6.618	/ 9.8	V=	9.912	/ 17.1	W=	.019417	/ .2	T=	3.150 / 17.8
LAT= 18.0	U=	8.956	/ 10.0	V=	11.164	/ 17.2	W=	.003411	/ 11.6	T=	1.124 / 17.8
LAT= 24.0	U=	9.726	/ 10.1	V=	9.988	/ 17.4	W=	.020520	/ 12.0	T=	.309 / 5.6
LAT= 30.0	U=	8.759	/ 10.1	V=	7.712	/ 17.7	W=	.028071	/ 12.0	T=	.822 / 5.7
LAT= 36.0	U=	6.914	/ 10.2	V=	5.335	/ 18.3	W=	.028702	/ 12.0	T=	.659 / 5.7
LAT= 42.0	U=	4.478	/ 10.5	V=	3.550	/ 19.6	W=	.026041	/ 12.0	T=	.199 / 5.4
LAT= 48.0	U=	2.481	/ 11.4	V=	3.034	/ 21.6	W=	.022259	/ 11.9	T=	.294 / 18.0
LAT= 54.0	U=	1.614	/ 14.3	V=	3.455	/ 22.9	W=	.019015	/ 11.9	T=	.665 / 17.9
LAT= 60.0	U=	2.274	/ 16.8	V=	4.162	/ 23.4	W=	.016736	/ 11.9	T=	.816 / 17.9
LAT= 66.0	U=	3.322	/ 17.6	V=	4.845	/ 23.7	W=	.014315	/ 11.9	T=	.835 / 17.9
LAT= 72.0	U=	4.352	/ 17.7	V=	5.477	/ 23.8	W=	.011487	/ 11.9	T=	.747 / 17.8
LAT= 78.0	U=	5.223	/ 17.8	V=	6.014	/ 23.8	W=	.008127	/ 11.9	T=	.564 / 17.8

Z= 63.765 KM

LAT=-78.0	U=	10.406	/ 17.9	V=	11.834	/ 11.9	W=	.013637	/ 11.8	T=	.813 / 17.7
LAT=-72.0	U=	8.902	/ 17.9	V=	10.931	/ 11.8	W=	.018531	/ 11.8	T=	1.052 / 17.8
LAT=-66.0	U=	7.311	/ 17.8	V=	9.839	/ 11.8	W=	.022480	/ 11.7	T=	1.145 / 18.0
LAT=-60.0	U=	5.818	/ 17.6	V=	8.583	/ 11.8	W=	.025774	/ 11.5	T=	1.016 / 18.5
LAT=-54.0	U=	4.382	/ 16.9	V=	7.021	/ 11.6	W=	.028787	/ 11.2	T=	.709 / 20.0
LAT=-48.0	U=	1.982	/ 13.9	V=	4.962	/ 11.1	W=	.032857	/ 10.8	T=	.654 / 22.4
LAT=-42.0	U=	3.689	/ 9.3	V=	2.648	/ 9.0	W=	.037749	/ 10.4	T=	1.027 / 1.1
LAT=-36.0	U=	7.126	/ 8.5	V=	3.607	/ 3.7	W=	.041404	/ 10.1	T=	1.678 / 2.3
LAT=-30.0	U=	10.014	/ 8.2	V=	7.542	/ 2.2	W=	.040585	/ 9.9	T=	1.862 / 2.6
LAT=-24.0	U=	11.728	/ 8.0	V=	11.447	/ 1.8	W=	.030123	/ 10.1	T=	1.179 / 2.4
LAT=-18.0	U=	11.147	/ 7.9	V=	13.721	/ 1.7	W=	.010136	/ 13.3	T=	.789 / 16.4
LAT=-12.0	U=	8.470	/ 7.8	V=	12.423	/ 1.6	W=	.030892	/ 19.6	T=	3.459 / 15.5
LAT= -6.0	U=	5.450	/ 7.6	V=	7.180	/ 1.7	W=	.059895	/ 20.2	T=	5.893 / 15.4
LAT= 0.0	U=	4.157	/ 7.3	V=	.908	/ 11.8	W=	.072346	/ 20.3	T=	6.906 / 15.4
LAT= 6.0	U=	5.562	/ 7.5	V=	8.885	/ 13.3	W=	.061215	/ 20.3	T=	5.919 / 15.4
LAT= 12.0	U=	8.772	/ 7.7	V=	14.339	/ 13.4	W=	.033008	/ 20.1	T=	3.488 / 15.5
LAT= 18.0	U=	11.720	/ 7.8	V=	15.985	/ 13.4	W=	.005138	/ 15.1	T=	.802 / 16.5
LAT= 24.0	U=	12.695	/ 7.9	V=	14.085	/ 13.4	W=	.023768	/ 9.6	T=	1.228 / 2.5
LAT= 30.0	U=	11.453	/ 7.9	V=	10.486	/ 13.5	W=	.033583	/ 9.5	T=	1.982 / 2.8
LAT= 36.0	U=	9.076	/ 7.9	V=	6.536	/ 13.7	W=	.033673	/ 9.6	T=	1.870 / 2.8
LAT= 42.0	U=	5.877	/ 7.9	V=	2.952	/ 14.4	W=	.029363	/ 9.9	T=	1.366 / 2.6
LAT= 48.0	U=	3.024	/ 8.3	V=	1.003	/ 19.0	W=	.024032	/ 10.4	T=	.795 / 2.2
LAT= 54.0	U=	.974	/ 10.9	V=	2.273	/ 23.1	W=	.019911	/ 10.9	T=	.369 / 1.1
LAT= 60.0	U=	1.672	/ 16.7	V=	3.655	/ 23.6	W=	.017398	/ 11.3	T=	.190 / 23.2
LAT= 66.0	U=	3.092	/ 17.6	V=	4.716	/ 23.7	W=	.014903	/ 11.6	T=	.142 / 20.5
LAT= 72.0	U=	4.360	/ 17.9	V=	5.585	/ 23.8	W=	.012000	/ 11.7	T=	.140 / 18.9
LAT= 78.0	U=	5.396	/ 17.9	V=	6.270	/ 23.8	W=	.008573	/ 11.8	T=	.111 / 18.4

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 69.403 KM																							
LAT=-78.0	U=	10.582	/	17.9	V=	11.850	/	11.9	W=	.012963	/	11.6	T=	.541	/	18.0							
LAT=-72.0	U=	8.999	/	18.0	V=	10.864	/	11.9	W=	.017181	/	11.6	T=	.707	/	18.2							
LAT=-66.0	U=	6.900	/	18.1	V=	9.606	/	12.0	W=	.020064	/	11.5	T=	.836	/	18.4							
LAT=-60.0	U=	5.149	/	18.3	V=	8.137	/	12.1	W=	.021283	/	11.1	T=	.876	/	19.4							
LAT=-54.0	U=	3.611	/	18.9	V=	6.308	/	12.6	W=	.021362	/	10.3	T=	1.009	/	21.2							
LAT=-48.0	U=	2.136	/	.1	V=	4.213	/	14.1	W=	.022914	/	9.0	T=	1.570	/	21.8							
LAT=-42.0	U=	5.291	/	3.0	V=	4.206	/	18.1	W=	.027608	/	7.7	T=	2.311	/	22.4							
LAT=-36.0	U=	9.135	/	3.6	V=	8.743	/	20.3	W=	.033343	/	6.8	T=	2.993	/	22.8							
LAT=-30.0	U=	12.515	/	3.8	V=	14.755	/	21.0	W=	.034566	/	6.4	T=	3.130	/	22.9							
LAT=-24.0	U=	14.418	/	3.9	V=	20.384	/	21.2	W=	.023637	/	6.9	T=	2.088	/	22.8							
LAT=-18.0	U=	13.523	/	3.9	V=	23.414	/	21.3	W=	.014941	/	13.6	T=	.596	/	12.0							
LAT=-12.0	U=	10.141	/	4.0	V=	20.892	/	21.4	W=	.053474	/	16.0	T=	4.277	/	11.3							
LAT= -6.0	U=	6.383	/	4.2	V=	12.251	/	21.3	W=	.091027	/	16.3	T=	7.586	/	11.2							
LAT= 0.0	U=	4.753	/	4.4	V=	.744	/	11.7	W=	.106338	/	16.4	T=	8.938	/	11.2							
LAT= 6.0	U=	6.435	/	4.2	V=	13.570	/	9.6	W=	.090390	/	16.4	T=	7.577	/	11.3							
LAT= 12.0	U=	10.332	/	4.1	V=	22.400	/	9.6	W=	.052059	/	16.2	T=	4.263	/	11.4							
LAT= 18.0	U=	13.935	/	4.0	V=	25.229	/	9.5	W=	.011002	/	14.3	T=	.596	/	12.5							
LAT= 24.0	U=	15.161	/	4.0	V=	22.517	/	9.5	W=	.022825	/	5.9	T=	2.107	/	22.8							
LAT= 30.0	U=	13.716	/	4.0	V=	17.167	/	9.4	W=	.034289	/	5.6	T=	3.129	/	23.0							
LAT= 36.0	U=	10.910	/	4.0	V=	11.282	/	9.3	W=	.032431	/	5.9	T=	2.956	/	23.0							
LAT= 42.0	U=	7.139	/	3.9	V=	6.017	/	8.9	W=	.024998	/	6.5	T=	2.240	/	23.1							
LAT= 48.0	U=	3.813	/	3.7	V=	2.477	/	7.2	W=	.017718	/	7.7	T=	1.411	/	23.2							
LAT= 54.0	U=	1.336	/	2.0	V=	1.923	/	2.3	W=	.014185	/	9.4	T=	.745	/	23.5							
LAT= 60.0	U=	1.423	/	19.3	V=	3.291	/	.6	W=	.013544	/	10.6	T=	.412	/	.6							
LAT= 66.0	U=	2.910	/	18.2	V=	4.458	/	.1	W=	.012675	/	11.3	T=	.241	/	2.2							
LAT= 72.0	U=	4.211	/	18.1	V=	5.411	/	23.9	W=	.010744	/	11.6	T=	.153	/	4.0							
LAT= 78.0	U=	5.284	/	17.9	V=	6.159	/	23.9	W=	.007961	/	11.8	T=	.120	/	5.0							
Z= 75.140 KM																							
LAT=-78.0	U=	9.876	/	17.9	V=	11.515	/	11.9	W=	.011790	/	11.8	T=	.195	/	17.7							
LAT=-72.0	U=	8.329	/	18.1	V=	10.523	/	12.0	W=	.015196	/	11.8	T=	.282	/	17.9							
LAT=-66.0	U=	7.287	/	18.3	V=	9.522	/	12.1	W=	.016417	/	11.7	T=	.383	/	18.1							
LAT=-60.0	U=	6.901	/	18.8	V=	8.794	/	12.4	W=	.014825	/	11.6	T=	.587	/	18.6							
LAT=-54.0	U=	7.565	/	19.4	V=	8.684	/	13.1	W=	.009983	/	11.0	T=	.967	/	19.0							
LAT=-48.0	U=	9.159	/	20.6	V=	9.923	/	14.1	W=	.004225	/	6.3	T=	1.952	/	18.6							
LAT=-42.0	U=	13.221	/	21.1	V=	13.460	/	15.0	W=	.013557	/	1.8	T=	3.078	/	18.6							
LAT=-36.0	U=	18.800	/	21.3	V=	19.655	/	15.6	W=	.025096	/	1.2	T=	3.958	/	18.7							
LAT=-30.0	U=	23.033	/	21.4	V=	27.142	/	15.9	W=	.029348	/	1.1	T=	4.210	/	18.7							
LAT=-24.0	U=	25.105	/	21.5	V=	34.038	/	16.1	W=	.017151	/	1.3	T=	2.781	/	18.7							
LAT=-18.0	U=	22.604	/	21.6	V=	37.409	/	16.2	W=	.017939	/	12.2	T=	.941	/	6.6							
LAT=-12.0	U=	15.868	/	21.7	V=	32.830	/	16.2	W=	.067128	/	12.6	T=	6.096	/	6.7							
LAT= -6.0	U=	8.675	/	21.9	V=	19.522	/	16.2	W=	.111530	/	12.6	T=	10.722	/	6.7							
LAT= 0.0	U=	5.622	/	22.2	V=	.652	/	11.7	W=	.129453	/	12.6	T=	12.604	/	6.7							
LAT= 6.0	U=	8.679	/	21.9	V=	19.035	/	4.4	W=	.110452	/	12.6	T=	10.677	/	6.7							
LAT= 12.0	U=	15.817	/	21.7	V=	32.272	/	4.4	W=	.064980	/	12.6	T=	6.015	/	6.7							
LAT= 18.0	U=	22.439	/	21.6	V=	36.737	/	4.3	W=	.014699	/	12.3	T=	.831	/	6.7							
LAT= 24.0	U=	24.773	/	21.6	V=	33.228	/	4.3	W=	.021228	/	1.0	T=	2.883	/	18.7							
LAT= 30.0	U=	22.474	/	21.6	V=	26.003	/	4.3	W=	.034368	/	.9	T=	4.289	/	18.7							
LAT= 36.0	U=	17.939	/	21.6	V=	18.213	/	4.1	W=	.030925	/	1.0	T=	3.995	/	18.7							
LAT= 42.0	U=	12.064	/	21.5	V=	11.460	/	3.8	W=	.019989	/	1.2	T=	2.919	/	18.7							
LAT= 48.0	U=	7.468	/	21.3	V=	7.121	/	3.2	W=	.008051	/	1.9	T=	1.690	/	18.8							
LAT= 54.0	U=	4.706	/	20.7	V=	5.061	/	2.1	W=	.003153	/	9.3	T=	.694	/	19.0							
LAT= 60.0	U=	3.711	/	19.5	V=	4.666	/	1.0	W=	.007662	/	11.3	T=	.143	/	22.5							
LAT= 66.0	U=	3.832	/	18.6	V=	4.907	/	.4	W=	.009528	/	11.7	T=	.260	/	4.8							
LAT= 72.0	U=	4.412	/	18.2	V=	5.486	/	.1	W=	.008882	/	11.9	T=	.299	/	5.9							
LAT= 78.0	U=	5.248	/	18.1	V=	6.099	/	24.0	W=	.006887	/	11.9	T=	.278	/	6.0							

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 81.010 KM								
LAT=-78.0	U= 9.339 / 17.8	V= 10.237 / 11.9	W= .010583 / 11.9	T= .346 / 5.6
LAT=-72.0	U= 8.285 / 17.8	V= 9.570 / 11.9	W= .013932 / 12.1	T= .437 / 6.3
LAT=-66.0	U= 6.790 / 17.9	V= 8.950 / 12.0	W= .015939 / 12.5	T= .527 / 9.1
LAT=-60.0	U= 7.027 / 17.6	V= 8.871 / 12.2	W= .016189 / 13.2	T= .790 / 10.6
LAT=-54.0	U= 9.636 / 17.2	V= 9.826 / 12.5	W= .015632 / 14.5	T= 1.194 / 11.6
LAT=-48.0	U= 12.232 / 17.1	V= 12.637 / 12.9	W= .019914 / 16.5	T= 2.565 / 12.9
LAT=-42.0	U= 17.943 / 16.9	V= 18.061 / 13.2	W= .029362 / 17.9	T= 4.190 / 13.3
LAT=-36.0	U= 26.099 / 16.9	V= 26.467 / 13.3	W= .039305 / 18.6	T= 5.460 / 13.4
LAT=-30.0	U= 31.887 / 16.8	V= 36.303 / 13.4	W= .042032 / 18.8	T= 5.846 / 13.5
LAT=-24.0	U= 34.717 / 16.8	V= 45.358 / 13.5	W= .027567 / 18.5	T= 3.866 / 13.4
LAT=-18.0	U= 31.275 / 16.8	V= 49.628 / 13.5	W= .015158 / 9.8	T= 1.407 / 2.7
LAT=-12.0	U= 21.918 / 16.8	V= 43.473 / 13.5	W= .068122 / 8.1	T= 8.596 / 1.9
LAT= -6.0	U= 11.886 / 16.7	V= 25.882 / 13.5	W= .117107 / 8.0	T= 15.076 / 1.9
LAT= 0.0	U= 7.557 / 16.7	V= .538 / 11.7	W= .137139 / 7.9	T= 17.727 / 1.8
LAT= 6.0	U= 11.835 / 16.7	V= 24.898 / 1.6	W= .116744 / 8.0	T= 15.051 / 1.8
LAT= 12.0	U= 21.774 / 16.8	V= 42.385 / 1.6	W= .067321 / 8.1	T= 8.544 / 1.9
LAT= 18.0	U= 30.997 / 16.8	V= 48.366 / 1.6	W= .013293 / 9.5	T= 1.311 / 2.4
LAT= 24.0	U= 34.291 / 16.8	V= 43.870 / 1.5	W= .028211 / 18.9	T= 3.926 / 13.5
LAT= 30.0	U= 31.169 / 16.8	V= 34.553 / 1.5	W= .043211 / 19.1	T= 5.927 / 13.6
LAT= 36.0	U= 24.945 / 16.8	V= 24.414 / 1.5	W= .040683 / 19.0	T= 5.576 / 13.5
LAT= 42.0	U= 16.871 / 16.8	V= 15.605 / 1.4	W= .030195 / 18.6	T= 4.152 / 13.4
LAT= 48.0	U= 10.506 / 16.9	V= 9.820 / 1.2	W= .018907 / 17.7	T= 2.545 / 13.0
LAT= 54.0	U= 6.533 / 17.1	V= 6.700 / .9	W= .011787 / 15.9	T= 1.319 / 12.1
LAT= 60.0	U= 4.924 / 17.3	V= 5.401 / .5	W= .010018 / 14.0	T= .765 / 9.7
LAT= 66.0	U= 4.356 / 17.6	V= 5.147 / .2	W= .009481 / 12.9	T= .643 / 7.7
LAT= 72.0	U= 4.289 / 17.9	V= 5.433 / 0.0	W= .008024 / 12.5	T= .490 / 7.2
LAT= 78.0	U= 4.989 / 17.9	V= 5.948 / 23.9	W= .005965 / 12.3	T= .383 / 6.7
Z= 87.062 KM								
LAT=-78.0	U= 6.852 / 17.8	V= 8.438 / 11.7	W= .010731 / 12.0	T= .873 / 6.4
LAT=-72.0	U= 5.437 / 17.7	V= 7.454 / 11.6	W= .014821 / 12.0	T= 1.251 / 6.5
LAT=-66.0	U= 4.651 / 17.0	V= 6.362 / 11.4	W= .018390 / 12.1	T= 1.686 / 6.4
LAT=-60.0	U= 5.029 / 15.5	V= 5.509 / 10.5	W= .022494 / 12.2	T= 2.319 / 6.4
LAT=-54.0	U= 7.802 / 14.0	V= 5.699 / 8.8	W= .027866 / 12.3	T= 3.256 / 6.5
LAT=-48.0	U= 11.565 / 12.7	V= 8.685 / 6.9	W= .038671 / 12.5	T= 4.709 / 7.0
LAT=-42.0	U= 19.117 / 12.3	V= 15.351 / 5.8	W= .051261 / 12.6	T= 6.645 / 7.2
LAT=-36.0	U= 29.158 / 12.2	V= 25.633 / 5.4	W= .061046 / 12.7	T= 8.337 / 7.2
LAT=-30.0	U= 36.426 / 12.1	V= 37.571 / 5.2	W= .062216 / 12.7	T= 8.581 / 7.2
LAT=-24.0	U= 40.150 / 12.1	V= 48.512 / 5.1	W= .043418 / 12.7	T= 5.861 / 7.2
LAT=-18.0	U= 36.541 / 12.1	V= 53.920 / 5.1	W= .003429 / 3.3	T= .956 / 20.3
LAT=-12.0	U= 26.106 / 12.0	V= 47.535 / 5.0	W= .065883 / 1.0	T= 10.284 / 19.4
LAT= -6.0	U= 14.824 / 11.9	V= 28.179 / 5.0	W= .122238 / .9	T= 18.652 / 19.4
LAT= 0.0	U= 9.960 / 11.7	V= .198 / 12.4	W= .145341 / .9	T= 22.079 / 19.4
LAT= 6.0	U= 14.846 / 11.9	V= 28.316 / 17.0	W= .122422 / .9	T= 18.663 / 19.4
LAT= 12.0	U= 26.135 / 12.0	V= 47.695 / 17.0	W= .066390 / 1.0	T= 10.328 / 19.4
LAT= 18.0	U= 36.561 / 12.1	V= 54.124 / 17.0	W= .004134 / 2.6	T= 1.046 / 20.1
LAT= 24.0	U= 40.207 / 12.1	V= 48.706 / 17.0	W= .041677 / 12.7	T= 5.687 / 7.2
LAT= 30.0	U= 36.439 / 12.1	V= 37.800 / 17.1	W= .059595 / 12.7	T= 8.307 / 7.3
LAT= 36.0	U= 29.036 / 12.1	V= 25.921 / 17.2	W= .057404 / 12.7	T= 7.928 / 7.3
LAT= 42.0	U= 19.381 / 12.2	V= 15.434 / 17.4	W= .046058 / 12.7	T= 6.195 / 7.2
LAT= 48.0	U= 11.543 / 12.4	V= 8.381 / 18.0	W= .032636 / 12.6	T= 4.174 / 7.1
LAT= 54.0	U= 6.373 / 12.9	V= 4.636 / 19.5	W= .021715 / 12.5	T= 2.548 / 7.0
LAT= 60.0	U= 3.945 / 14.6	V= 3.632 / 21.6	W= .015754 / 12.3	T= 1.762 / 6.7
LAT= 66.0	U= 3.477 / 16.3	V= 4.006 / 23.0	W= .011322 / 12.2	T= 1.172 / 6.4
LAT= 72.0	U= 3.664 / 17.2	V= 4.677 / 23.6	W= .007642 / 12.2	T= .653 / 6.4
LAT= 78.0	U= 4.462 / 17.6	V= 5.327 / 23.8	W= .004910 / 12.2	T= .396 / 6.3

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 93.363 KM								
LAT=-78.0	U= 5.540 / 17.0	V= 6.217 / 11.7	W= .010728 / 11.9	T= .904 / 5.5
LAT=-72.0	U= 4.280 / 16.5	V= 5.310 / 11.5	W= .014254 / 11.8	T= 1.185 / 5.4
LAT=-66.0	U= 1.323 / 18.3	V= 3.874 / 11.3	W= .018413 / 11.4	T= 1.519 / 5.7
LAT=-60.0	U= 1.129 / 6.8	V= 2.016 / 10.2	W= .021862 / 10.7	T= 2.085 / 4.4
LAT=-54.0	U= 4.833 / 8.3	V= 2.048 / 3.2	W= .026555 / 9.7	T= 3.419 / 3.0
LAT=-48.0	U= 12.047 / 7.1	V= 7.166 / 1.5	W= .037429 / 9.1	T= 4.693 / 2.5
LAT=-42.0	U= 21.468 / 7.0	V= 15.665 / 1.1	W= .051802 / 8.6	T= 6.912 / 2.2
LAT=-36.0	U= 31.974 / 7.0	V= 27.833 / 1.0	W= .064566 / 8.3	T= 9.272 / 2.0
LAT=-30.0	U= 40.440 / 7.0	V= 41.365 / 1.0	W= .067030 / 8.2	T= 9.634 / 1.9
LAT=-24.0	U= 44.706 / 7.0	V= 53.663 / .9	W= .046076 / 8.4	T= 6.493 / 2.0
LAT=-18.0	U= 40.679 / 7.0	V= 59.753 / .9	W= .011361 / 16.8	T= 1.682 / 11.9
LAT=-12.0	U= 29.267 / 7.0	V= 52.617 / .9	W= .082511 / 19.3	T= 12.621 / 13.3
LAT= -6.0	U= 16.959 / 6.9	V= 31.082 / .9	W= .148639 / 19.4	T= 22.544 / 13.4
LAT= 0.0	U= 11.627 / 6.9	V= .515 / 9.8	W= .175831 / 19.5	T= 26.603 / 13.4
LAT= 6.0	U= 17.003 / 6.9	V= 31.799 / 12.9	W= .148527 / 19.4	T= 22.482 / 13.4
LAT= 12.0	U= 29.373 / 6.9	V= 53.354 / 12.9	W= .082458 / 19.3	T= 12.528 / 13.3
LAT= 18.0	U= 40.867 / 6.9	V= 60.517 / 12.9	W= .011240 / 16.9	T= 1.603 / 11.8
LAT= 24.0	U= 44.936 / 6.9	V= 54.436 / 12.9	W= .045067 / 8.3	T= 6.565 / 2.0
LAT= 30.0	U= 40.775 / 6.9	V= 42.116 / 12.9	W= .065270 / 8.1	T= 9.592 / 1.8
LAT= 36.0	U= 32.473 / 6.9	V= 28.527 / 12.9	W= .061831 / 8.0	T= 9.019 / 1.7
LAT= 42.0	U= 21.464 / 6.9	V= 16.367 / 12.9	W= .047590 / 8.1	T= 6.839 / 1.7
LAT= 48.0	U= 12.243 / 7.0	V= 7.828 / 13.0	W= .031237 / 8.3	T= 4.325 / 1.6
LAT= 54.0	U= 5.641 / 7.0	V= 2.473 / 13.6	W= .018262 / 8.7	T= 2.291 / 1.6
LAT= 60.0	U= 1.431 / 9.3	V= .876 / 22.3	W= .011374 / 9.4	T= 1.320 / 1.6
LAT= 66.0	U= 1.479 / 16.7	V= 2.569 / 23.9	W= .007438 / 10.2	T= .647 / 1.6
LAT= 72.0	U= 2.225 / 18.9	V= 3.655 / 24.0	W= .005312 / 10.9	T= .150 / .4
LAT= 78.0	U= 3.255 / 18.5	V= 4.390 / 23.9	W= .003534 / 11.3	T= .046 / 19.5
Z= 96.638 KM								
LAT=-78.0	U= 1.975 / 17.7	V= 4.098 / 11.5	W= .011134 / 12.5	T= 1.691 / 6.3
LAT=-72.0	U= .480 / 22.6	V= 2.793 / 11.8	W= .013691 / 12.4	T= 2.041 / 6.2
LAT=-66.0	U= 2.331 / .3	V= 1.453 / 13.7	W= .015781 / 11.4	T= 2.586 / 5.3
LAT=-60.0	U= 3.136 / 2.2	V= 1.651 / 19.3	W= .016026 / 9.9	T= 2.877 / 3.7
LAT=-54.0	U= 5.338 / 4.7	V= 4.486 / 21.2	W= .018458 / 7.6	T= 3.769 / 1.5
LAT=-48.0	U= 14.255 / 4.0	V= 9.855 / 21.6	W= .027410 / 6.1	T= 4.351 / .1
LAT=-42.0	U= 24.399 / 3.9	V= 18.650 / 21.6	W= .043858 / 5.2	T= 6.608 / 23.2
LAT=-36.0	U= 34.766 / 4.0	V= 31.339 / 21.6	W= .060902 / 4.8	T= 9.417 / 22.9
LAT=-30.0	U= 43.726 / 4.0	V= 45.431 / 21.6	W= .064571 / 4.7	T= 9.894 / 22.8
LAT=-24.	U= 48.126 / 4.0	V= 58.230 / 21.6	W= .041641 / 5.0	T= 6.545 / 23.0
LAT=-18.0	U= 43.570 / 3.9	V= 64.485 / 21.6	W= .022140 / 14.3	T= 2.543 / 8.4
LAT=-12.0	U= 31.188 / 3.9	V= 56.801 / 21.6	W= .103983 / 15.7	T= 14.378 / 9.9
LAT= -6.0	U= 17.883 / 4.0	V= 33.924 / 21.5	W= .178839 / 15.8	T= 25.210 / 10.1
LAT= 0.0	U= 12.110 / 4.0	V= .668 / 20.0	W= .209786 / 15.8	T= 29.696 / 10.1
LAT= 6.0	U= 17.868 / 4.0	V= 32.695 / 9.6	W= .179115 / 15.8	T= 25.300 / 10.1
LAT= 12.0	U= 31.165 / 4.0	V= 55.579 / 9.6	W= .104150 / 15.6	T= 14.491 / 10.0
LAT= 18.0	U= 43.551 / 4.0	V= 63.279 / 9.6	W= .021907 / 14.2	T= 2.525 / 8.7
LAT= 24.0	U= 47.944 / 4.0	V= 57.037 / 9.6	W= .042878 / 4.9	T= 6.498 / 22.6
LAT= 30.0	U= 43.544 / 4.0	V= 44.265 / 9.6	W= .066885 / 4.5	T= 9.957 / 22.4
LAT= 36.0	U= 34.745 / 4.0	V= 30.215 / 9.6	W= .064266 / 4.4	T= 9.543 / 22.3
LAT= 42.0	U= 23.108 / 4.0	V= 17.708 / 9.5	W= .049080 / 4.4	T= 7.354 / 22.1
LAT= 48.0	U= 13.490 / 4.0	V= 9.020 / 9.4	W= .031108 / 4.4	T= 4.780 / 21.9
LAT= 54.0	U= 6.793 / 3.9	V= 3.712 / 8.8	W= .016487 / 4.6	T= 2.726 / 21.4
LAT= 60.0	U= 2.293 / 3.1	V= 1.255 / 5.7	W= .008028 / 5.2	T= 1.564 / 21.0
LAT= 66.0	U= .793 / 21.5	V= 1.617 / 1.2	W= .003758 / 6.8	T= .929 / 20.1
LAT= 72.0	U= 1.340 / 19.1	V= 2.389 / .2	W= .003119 / 9.2	T= .685 / 19.1
LAT= 78.0	U= 2.083 / 18.3	V= 2.907 / 23.9	W= .002610 / 10.6	T= .473 / 18.5

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 100.017 KM

LAT=-78.0	U= 6.035 / 18.8	V= 8.507 / 11.9	W= .014686 / 12.7	T= .807 / 15.3
LAT=-72.0	U= 4.665 / 20.2	V= 7.212 / 12.2	W= .017935 / 12.7	T= 1.430 / 16.0
LAT=-66.0	U= 5.191 / 20.1	V= 6.237 / 12.8	W= .017228 / 11.8	T= 2.124 / 18.1
LAT=-60.0	U= 6.022 / 20.4	V= 5.906 / 13.8	W= .013955 / 10.5	T= 3.522 / 19.0
LAT=-54.0	U= 7.707 / 21.1	V= 6.977 / 15.3	W= .011598 / 7.2	T= 5.569 / 19.4
LAT=-48.0	U= 14.214 / 23.5	V= 10.920 / 16.7	W= .018825 / 4.1	T= 8.276 / 18.9
LAT=-42.0	U= 24.154 / 0.0	V= 19.019 / 17.5	W= .036943 / 2.9	T= 11.474 / 18.9
LAT=-36.0	U= 34.855 / .1	V= 31.542 / 17.9	W= .055677 / 2.6	T= 14.229 / 19.2
LAT=-30.0	U= 44.188 / .2	V= 45.800 / 18.1	W= .059382 / 2.5	T= 14.840 / 19.1
LAT=-24.0	U= 48.933 / .2	V= 58.912 / 18.2	W= .033891 / 3.0	T= 11.137 / 18.9
LAT=-18.0	U= 44.449 / .2	V= 65.391 / 18.2	W= .034591 / 13.0	T= 2.517 / 15.7
LAT=-12.0	U= 31.739 / .2	V= 57.642 / 18.2	W= .125629 / 13.7	T= 12.217 / 8.4
LAT= -6.0	U= 17.975 / .2	V= 34.201 / 18.0	W= .207528 / 13.8	T= 24.081 / 8.0
LAT= 0.0	U= 12.053 / .4	V= 3.526 / 12.1	W= .241277 / 13.8	T= 29.208 / 8.0
LAT= 6.0	U= 18.109 / .6	V= 34.688 / 6.7	W= .207673 / 13.8	T= 24.791 / 7.9
LAT= 12.0	U= 31.978 / .6	V= 58.076 / 6.6	W= .125151 / 13.6	T= 13.470 / 8.0
LAT= 18.0	U= 44.768 / .5	V= 65.801 / 6.5	W= .032838 / 12.9	T= .989 / 11.0
LAT= 24.0	U= 49.203 / .5	V= 59.146 / 6.4	W= .038581 / 2.8	T= 8.649 / 19.5
LAT= 30.0	U= 44.536 / .5	V= 45.872 / 6.4	W= .067349 / 2.3	T= 12.217 / 19.6
LAT= 36.0	U= 35.395 / .4	V= 31.449 / 6.3	W= .067195 / 2.2	T= 11.594 / 19.6
LAT= 42.0	U= 23.488 / .3	V= 18.797 / 6.1	W= .053075 / 2.2	T= 8.951 / 19.6
LAT= 48.0	U= 13.838 / .1	V= 10.214 / 5.8	W= .035092 / 2.1	T= 5.902 / 19.6
LAT= 54.0	U= 7.398 / 23.7	V= 5.204 / 5.2	W= .019871 / 2.0	T= 3.387 / 19.5
LAT= 60.0	U= 3.691 / 23.0	V= 2.752 / 3.9	W= .010352 / 2.0	T= 2.024 / 19.2
LAT= 66.0	U= 2.000 / 21.5	V= 1.996 / 2.0	W= .004424 / 2.4	T= 1.207 / 18.9
LAT= 72.0	U= 1.583 / 19.7	V= 2.107 / .6	W= .001617 / 5.6	T= .774 / 18.6
LAT= 78.0	U= 1.905 / 18.5	V= 2.377 / .1	W= .001636 / 10.2	T= .458 / 18.3

Z= 103.521 KM

LAT=-78.0	U= 20.091 / 18.1	V= 21.843 / 11.4	W= .021624 / 12.4	T= 7.407 / 16.3
LAT=-72.0	U= 18.215 / 18.9	V= 19.946 / 11.7	W= .028068 / 12.5	T= 9.725 / 16.3
LAT=-66.0	U= 15.383 / 18.9	V= 18.285 / 12.0	W= .028120 / 12.3	T= 11.285 / 16.8
LAT=-60.0	U= 15.840 / 18.7	V= 17.684 / 12.3	W= .023430 / 12.0	T= 12.693 / 17.1
LAT=-54.0	U= 20.248 / 18.5	V= 18.630 / 12.8	W= .012944 / 11.6	T= 14.052 / 17.4
LAT=-48.0	U= 23.158 / 20.1	V= 22.106 / 13.5	W= .003240 / 17.4	T= 16.730 / 16.8
LAT=-42.0	U= 31.665 / 20.8	V= 29.350 / 14.2	W= .019755 / 22.9	T= 19.696 / 16.7
LAT=-36.0	U= 42.411 / 20.9	V= 41.178 / 14.8	W= .039043 / 23.4	T= 21.776 / 16.8
LAT=-30.0	U= 50.781 / 21.2	V= 55.326 / 15.1	W= .042128 / 23.5	T= 21.778 / 16.7
LAT=-24.0	U= 54.638 / 21.3	V= 68.251 / 15.3	W= .015797 / 22.9	T= 17.244 / 16.8
LAT=-18.0	U= 49.177 / 21.3	V= 74.283 / 15.4	W= .051846 / 12.0	T= 6.723 / 17.4
LAT=-12.0	U= 34.960 / 21.3	V= 65.493 / 15.3	W= .144670 / 11.9	T= 8.115 / 3.5
LAT= -6.0	U= 19.700 / 21.3	V= 40.493 / 15.0	W= .227379 / 11.8	T= 20.903 / 4.0
LAT= 0.0	U= 12.487 / 21.6	V= 9.273 / 11.0	W= .260725 / 11.8	T= 26.601 / 4.1
LAT= 6.0	U= 17.905 / 22.0	V= 35.285 / 4.8	W= .225189 / 11.8	T= 22.184 / 4.0
LAT= 12.0	U= 31.937 / 22.0	V= 60.664 / 4.3	W= .139537 / 11.8	T= 10.511 / 3.7
LAT= 18.0	U= 45.431 / 21.9	V= 70.347 / 4.1	W= .042966 / 11.9	T= 3.547 / 18.5
LAT= 24.0	U= 50.996 / 21.8	V= 65.004 / 3.9	W= .029149 / 23.6	T= 12.960 / 16.9
LAT= 30.0	U= 47.424 / 21.7	V= 52.391 / 3.8	W= .060681 / 23.7	T= 16.702 / 16.8
LAT= 36.0	U= 39.497 / 21.6	V= 38.119 / 3.5	W= .062542 / 23.8	T= 16.022 / 16.8
LAT= 42.0	U= 28.292 / 21.3	V= 25.172 / 3.2	W= .050258 / 23.8	T= 13.052 / 16.9
LAT= 48.0	U= 18.973 / 20.8	V= 16.132 / 2.7	W= .034120 / 23.9	T= 9.439 / 17.1
LAT= 54.0	U= 12.415 / 20.3	V= 10.332 / 2.0	W= .020866 / 23.9	T= 6.146 / 17.2
LAT= 60.0	U= 8.478 / 19.5	V= 6.786 / 1.5	W= .012798 / 23.9	T= 3.228 / 17.4
LAT= 66.0	U= 5.898 / 18.9	V= 4.850 / 1.0	W= .007032 / 0.0	T= 1.670 / 17.7
LAT= 72.0	U= 3.566 / 19.2	V= 3.888 / .5	W= .002603 / 1.1	T= 1.301 / 17.6
LAT= 78.0	U= 3.357 / 18.7	V= 3.650 / .1	W= .000501 / 6.7	T= .755 / 17.4

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 107.177 KM

LAT=-78.0	U=	29.830	/	18.1	V=	30.168	/	11.3	W=	.026669	/ 12.0	T=	3.900	/	15.8
LAT=-72.0	U=	28.829	/	18.7	V=	28.369	/	11.6	W=	.037657	/ 12.1	T=	6.391	/	15.9
LAT=-66.0	U=	24.689	/	18.8	V=	26.608	/	11.9	W=	.043855	/ 12.2	T=	8.429	/	16.1
LAT=-60.0	U=	23.799	/	18.4	V=	25.996	/	12.1	W=	.042811	/ 12.5	T=	10.142	/	16.5
LAT=-54.0	U=	28.087	/	17.5	V=	27.065	/	12.2	W=	.034504	/ 13.2	T=	11.770	/	16.9
LAT=-48.0	U=	30.259	/	18.6	V=	30.852	/	12.5	W=	.036395	/ 14.5	T=	13.280	/	15.9
LAT=-42.0	U=	37.687	/	19.0	V=	38.310	/	12.8	W=	.039087	/ 16.3	T=	15.848	/	15.4
LAT=-36.0	U=	47.746	/	18.8	V=	50.038	/	13.0	W=	.046524	/ 17.9	T=	17.795	/	15.4
LAT=-30.0	U=	54.522	/	18.9	V=	63.694	/	13.2	W=	.049139	/ 18.1	T=	17.633	/	15.3
LAT=-24.0	U=	56.980	/	19.0	V=	75.845	/	13.3	W=	.036921	/ 16.1	T=	12.836	/	15.4
LAT=-18.0	U=	50.467	/	19.0	V=	80.909	/	13.3	W=	.065555	/ 11.4	T=	2.704	/	18.7
LAT=-12.0	U=	35.311	/	19.0	V=	70.811	/	13.3	W=	.147803	/ 10.2	T=	14.158	/	2.0
LAT= -6.0	U=	19.230	/	19.1	V=	44.173	/	13.1	W=	.224654	/ 9.8	T=	27.595	/	2.2
LAT= 0.0	U=	11.124	/	19.2	V=	7.591	/	10.7	W=	.254529	/ 9.7	T=	33.172	/	2.3
LAT= 6.0	U=	15.625	/	19.4	V=	33.746	/	2.1	W=	.218445	/ 9.8	T=	27.873	/	2.2
LAT= 12.0	U=	29.168	/	19.3	V=	61.458	/	1.8	W=	.134894	/ 10.0	T=	14.749	/	1.9
LAT= 18.0	U=	42.874	/	19.3	V=	73.303	/	1.7	W=	.044266	/ 11.2	T=	3.038	/	20.0
LAT= 24.0	U=	49.636	/	19.3	V=	69.905	/	1.6	W=	.035684	/ 19.2	T=	11.946	/	15.7
LAT= 30.0	U=	47.737	/	19.2	V=	58.632	/	1.5	W=	.061434	/ 20.3	T=	16.339	/	15.4
LAT= 36.0	U=	41.805	/	19.2	V=	45.054	/	1.4	W=	.060327	/ 20.5	T=	16.056	/	15.5
LAT= 42.0	U=	32.324	/	19.0	V=	32.081	/	1.2	W=	.046284	/ 20.6	T=	13.403	/	15.8
LAT= 48.0	U=	23.907	/	18.9	V=	22.532	/	1.0	W=	.029982	/ 20.7	T=	10.161	/	16.2
LAT= 54.0	U=	17.499	/	18.7	V=	15.840	/	.8	W=	.017917	/ 20.9	T=	7.295	/	16.5
LAT= 60.0	U=	13.185	/	18.4	V=	11.253	/	.5	W=	.011921	/ 21.5	T=	4.922	/	16.8
LAT= 66.0	U=	9.965	/	18.2	V=	8.373	/	.3	W=	.007566	/ 22.2	T=	3.134	/	17.1
LAT= 72.0	U=	7.027	/	18.1	V=	6.523	/	24.0	W=	.003771	/ 23.5	T=	1.794	/	17.8
LAT= 78.0	U=	6.234	/	17.9	V=	5.614	/	23.8	W=	.001637	/ .3	T=	.976	/	18.2

Z= 111.019 KM

LAT=-78.0	U=	32.668	/	18.1	V=	32.629	/	11.5	W=	.027317	/ 11.9	T=	3.354	/	5.4
LAT=-72.0	U=	32.196	/	18.5	V=	31.099	/	11.6	W=	.041997	/ 11.9	T=	3.934	/	5.8
LAT=-66.0	U=	29.946	/	18.6	V=	29.508	/	11.8	W=	.056640	/ 12.2	T=	3.971	/	7.8
LAT=-60.0	U=	27.431	/	18.1	V=	28.528	/	11.9	W=	.062732	/ 12.6	T=	3.854	/	9.5
LAT=-54.0	U=	27.599	/	16.8	V=	28.732	/	11.7	W=	.061760	/ 13.3	T=	3.796	/	11.6
LAT=-48.0	U=	28.925	/	17.6	V=	31.281	/	11.5	W=	.078505	/ 13.7	T=	8.338	/	9.8
LAT=-42.0	U=	34.142	/	17.4	V=	37.213	/	11.3	W=	.091866	/ 14.2	T=	12.244	/	9.7
LAT=-36.0	U=	42.667	/	16.8	V=	47.053	/	11.0	W=	.100015	/ 14.9	T=	14.022	/	10.1
LAT=-30.0	U=	47.966	/	16.7	V=	58.678	/	10.9	W=	.102041	/ 14.9	T=	14.911	/	9.9
LAT=-24.0	U=	49.631	/	16.6	V=	68.912	/	10.8	W=	.084221	/ 14.2	T=	10.817	/	9.4
LAT=-18.0	U=	43.346	/	16.5	V=	72.480	/	10.7	W=	.065429	/ 11.0	T=	4.164	/	3.6
LAT=-12.0	U=	29.235	/	16.5	V=	62.037	/	10.6	W=	.116991	/ 7.8	T=	17.391	/	23.6
LAT= -6.0	U=	14.522	/	16.4	V=	36.132	/	10.6	W=	.186885	/ 6.9	T=	31.195	/	23.1
LAT= 0.0	U=	7.527	/	16.1	V=	.599	/	.9	W=	.215894	/ 6.7	T=	36.926	/	23.0
LAT= 6.0	U=	12.489	/	16.0	V=	37.321	/	22.7	W=	.182991	/ 6.7	T=	31.319	/	22.9
LAT= 12.0	U=	25.882	/	16.1	V=	63.594	/	22.7	W=	.105941	/ 7.2	T=	17.520	/	22.8
LAT= 18.0	U=	39.421	/	16.2	V=	74.577	/	22.7	W=	.034307	/ 10.6	T=	2.284	/	21.2
LAT= 24.0	U=	46.318	/	15.3	V=	70.974	/	22.8	W=	.060110	/ 15.9	T=	9.252	/	11.6
LAT= 30.0	U=	45.119	/	16.4	V=	60.144	/	22.9	W=	.081715	/ 16.6	T=	13.574	/	11.6
LAT= 36.0	U=	40.166	/	16.5	V=	47.298	/	23.0	W=	.077525	/ 16.7	T=	12.894	/	11.8
LAT= 42.0	U=	32.149	/	16.7	V=	35.069	/	23.1	W=	.059295	/ 16.7	T=	9.708	/	12.4
LAT= 48.0	U=	25.029	/	16.9	V=	26.192	/	23.3	W=	.039312	/ 16.7	T=	6.940	/	13.6
LAT= 54.0	U=	19.653	/	17.0	V=	20.124	/	23.3	W=	.023738	/ 16.9	T=	5.800	/	15.1
LAT= 60.0	U=	16.978	/	17.2	V=	15.891	/	23.3	W=	.013557	/ 17.8	T=	4.706	/	16.0
LAT= 66.0	U=	14.664	/	17.2	V=	13.143	/	23.3	W=	.007964	/ 19.5	T=	3.837	/	17.0
LAT= 72.0	U=	12.022	/	17.0	V=	11.261	/	23.2	W=	.005940	/ 21.8	T=	3.086	/	18.3
LAT= 78.0	U=	11.173	/	17.0	V=	10.297	/	23.1	W=	.004772	/ 22.8	T=	2.360	/	18.8

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 115.091 KM											
LAT=-78.0	U=	28.933	/ 18.2	V=	28.606	/ 11.8	W=	.025165	/ 11.7	T=	7.522 / 4.8
LAT=-72.0	U=	28.749	/ 18.5	V=	27.445	/ 11.9	W=	.041232	/ 11.8	T=	10.769 / 4.9
LAT=-66.0	U=	28.144	/ 18.6	V=	25.964	/ 12.0	W=	.061112	/ 12.1	T=	13.079 / 5.4
LAT=-60.0	U=	23.950	/ 18.1	V=	24.246	/ 11.9	W=	.072537	/ 12.5	T=	13.371 / 5.9
LAT=-54.0	U=	19.387	/ 16.2	V=	22.693	/ 11.5	W=	.077327	/ 13.1	T=	11.940 / 6.6
LAT=-48.0	U=	20.257	/ 16.7	V=	22.709	/ 10.7	W=	.101559	/ 12.9	T=	18.646 / 6.3
LAT=-42.0	U=	23.240	/ 15.9	V=	25.750	/ 9.8	W=	.122186	/ 13.1	T=	22.873 / 6.3
LAT=-36.0	U=	30.641	/ 14.6	V=	32.837	/ 9.0	W=	.134696	/ 13.5	T=	23.581 / 6.6
LAT=-30.0	U=	35.841	/ 14.3	V=	42.544	/ 8.4	W=	.136847	/ 13.4	T=	24.617 / 6.5
LAT=-24.0	U=	38.100	/ 14.0	V=	51.701	/ 8.1	W=	.112519	/ 13.1	T=	20.104 / 6.2
LAT=-18.0	U=	33.518	/ 13.8	V=	55.443	/ 7.8	W=	.060109	/ 11.3	T=	9.357 / 4.5
LAT=-12.0	U=	22.456	/ 13.5	V=	47.122	/ 7.6	W=	.072127	/ 5.6	T=	11.804 / 21.7
LAT= -6.0	U=	11.067	/ 12.8	V=	25.707	/ 7.2	W=	.143221	/ 4.1	T=	25.651 / 20.4
LAT= 0.0	U=	6.827	/ 11.6	V=	7.486	/ 22.7	W=	.176712	/ 3.8	T=	32.453 / 20.1
LAT= 6.0	U=	11.723	/ 12.4	V=	36.775	/ 20.5	W=	.148075	/ 3.8	T=	27.969 / 20.0
LAT= 12.0	U=	23.625	/ 13.2	V=	58.341	/ 20.3	W=	.074988	/ 4.4	T=	15.221 / 20.2
LAT= 18.0	U=	35.544	/ 13.5	V=	66.754	/ 20.4	W=	.026144	/ 11.2	T=	1.420 / .2
LAT= 24.0	U=	41.273	/ 13.7	V=	63.126	/ 20.5	W=	.078332	/ 14.1	T=	9.932 / 7.5
LAT= 30.0	U=	40.063	/ 13.9	V=	53.583	/ 20.8	W=	.100804	/ 14.4	T=	13.543 / 7.7
LAT= 36.0	U=	35.816	/ 14.3	V=	42.794	/ 21.2	W=	.095720	/ 14.5	T=	12.143 / 7.9
LAT= 42.0	U=	29.550	/ 14.7	V=	33.758	/ 21.7	W=	.074646	/ 14.5	T=	7.332 / 8.4
LAT= 48.0	U=	24.481	/ 15.3	V=	28.264	/ 22.2	W=	.051136	/ 14.8	T=	3.653 / 10.9
LAT= 54.0	U=	21.492	/ 16.0	V=	25.443	/ 22.6	W=	.032256	/ 15.6	T=	4.639 / 14.5
LAT= 60.0	U=	23.346	/ 16.4	V=	23.807	/ 22.8	W=	.018383	/ 16.9	T=	4.849 / 16.3
LAT= 66.0	U=	24.049	/ 16.6	V=	23.141	/ 22.9	W=	.012368	/ 19.4	T=	5.445 / 17.4
LAT= 72.0	U=	22.940	/ 16.6	V=	23.040	/ 23.0	W=	.013017	/ 21.8	T=	6.021 / 18.1
LAT= 78.0	U=	23.383	/ 16.8	V=	23.581	/ 23.0	W=	.012144	/ 22.8	T=	5.048 / 18.2
Z= 119.451 KM											
LAT=-78.0	U=	22.000	/ 18.3	V=	21.881	/ 12.2	W=	.023873	/ 11.8	T=	8.438 / 4.3
LAT=-72.0	U=	21.788	/ 18.4	V=	21.039	/ 12.2	W=	.039909	/ 11.9	T=	12.710 / 4.4
LAT=-66.0	U=	21.799	/ 18.5	V=	19.698	/ 12.2	W=	.061314	/ 12.1	T=	16.801 / 4.8
LAT=-60.0	U=	16.692	/ 18.1	V=	17.510	/ 12.0	W=	.075338	/ 12.4	T=	18.093 / 5.2
LAT=-54.0	U=	9.520	/ 15.1	V=	14.611	/ 11.3	W=	.083663	/ 12.8	T=	16.927 / 5.8
LAT=-48.0	U=	10.121	/ 15.4	V=	12.541	/ 9.9	W=	.110517	/ 12.2	T=	24.108 / 5.2
LAT=-42.0	U=	12.580	/ 13.6	V=	14.093	/ 7.8	W=	.134799	/ 12.0	T=	28.234 / 5.1
LAT=-36.0	U=	21.494	/ 11.8	V=	21.221	/ 6.2	W=	.146858	/ 12.1	T=	28.030 / 5.2
LAT=-30.0	U=	27.611	/ 11.4	V=	31.222	/ 5.4	W=	.152490	/ 12.0	T=	28.992 / 5.1
LAT=-24.0	U=	30.929	/ 11.2	V=	40.928	/ 5.0	W=	.127078	/ 12.0	T=	23.983 / 5.0
LAT=-18.0	U=	28.330	/ 10.9	V=	46.110	/ 4.8	W=	.082021	/ 12.3	T=	11.354 / 4.6
LAT=-12.0	U=	20.592	/ 10.4	V=	41.254	/ 4.5	W=	.027940	/ 22.9	T=	5.775 / 19.0
LAT= -6.0	U=	12.577	/ 9.4	V=	25.788	/ 3.7	W=	.108600	/ 23.5	T=	20.357 / 17.8
LAT= 0.0	U=	9.696	/ 8.5	V=	10.964	/ 23.0	W=	.145857	/ 23.5	T=	27.793 / 17.6
LAT= 6.0	U=	13.041	/ 9.5	V=	27.871	/ 18.9	W=	.120336	/ 23.4	T=	24.437 / 17.6
LAT= 12.0	U=	21.733	/ 10.5	V=	44.377	/ 18.4	W=	.050346	/ 22.9	T=	13.168 / 17.7
LAT= 18.0	U=	30.477	/ 11.0	V=	50.930	/ 18.4	W=	.034826	/ 13.4	T=	.717 / 22.9
LAT= 24.0	U=	34.092	/ 11.4	V=	47.536	/ 18.8	W=	.091485	/ 12.5	T=	9.154 / 5.4
LAT= 30.0	U=	32.307	/ 11.8	V=	40.834	/ 19.4	W=	.111363	/ 12.5	T=	12.010 / 5.5
LAT= 36.0	U=	28.682	/ 12.5	V=	34.945	/ 20.3	W=	.103097	/ 12.6	T=	10.184 / 5.7
LAT= 42.0	U=	24.536	/ 13.5	V=	31.821	/ 21.3	W=	.077596	/ 12.9	T=	4.512 / 6.0
LAT= 48.0	U=	22.446	/ 14.7	V=	31.985	/ 22.2	W=	.049886	/ 13.6	T=	1.868 / 13.4
LAT= 54.0	U=	23.670	/ 16.0	V=	33.853	/ 22.7	W=	.030514	/ 15.7	T=	6.090 / 15.0
LAT= 60.0	U=	31.820	/ 16.6	V=	35.789	/ 23.0	W=	.020689	/ 18.8	T=	6.948 / 16.3
LAT= 66.0	U=	36.635	/ 16.8	V=	38.030	/ 23.2	W=	.024450	/ 21.4	T=	8.065 / 17.1
LAT= 72.0	U=	37.657	/ 16.9	V=	40.485	/ 23.3	W=	.029947	/ 22.7	T=	9.200 / 17.6
LAT= 78.0	U=	40.471	/ 17.2	V=	43.294	/ 23.4	W=	.027531	/ 23.2	T=	7.551 / 17.7

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 124.175 KM											
LAT=-78.0	U=	16.412	18.2	V=	16.908	12.4	W=	.027486	12.3	T=	6.421 / 3.6
LAT=-72.0	U=	15.849	18.1	V=	16.184	12.3	W=	.043664	12.3	T=	10.037 / 3.9
LAT=-66.0	U=	15.712	18.2	V=	15.016	12.1	W=	.064313	12.3	T=	14.101 / 4.2
LAT=-60.0	U=	10.260	17.9	V=	12.845	11.8	W=	.079485	12.5	T=	15.436 / 4.7
LAT=-54.0	U=	3.517	11.1	V=	9.574	11.1	W=	.090462	12.8	T=	14.562 / 5.4
LAT=-48.0	U=	3.771	11.2	V=	6.699	8.9	W=	.114279	11.8	T=	21.139 / 4.5
LAT=-42.0	U=	8.922	9.0	V=	8.376	5.3	W=	.138511	11.5	T=	24.683 / 4.2
LAT=-36.0	U=	20.156	8.2	V=	16.010	3.5	W=	.153772	11.5	T=	23.688 / 4.3
LAT=-30.0	U=	26.596	8.1	V=	26.013	2.9	W=	.158822	11.4	T=	24.604 / 4.1
LAT=-24.0	U=	30.329	8.0	V=	35.562	2.6	W=	.137146	11.6	T=	19.932 / 4.1
LAT=-18.0	U=	28.894	7.8	V=	41.365	2.4	W=	.084978	12.9	T=	8.356 / 4.9
LAT=-12.0	U=	22.879	7.4	V=	39.018	2.1	W=	.063494	17.6	T=	7.546 / 13.9
LAT= -6.0	U=	16.148	6.9	V=	27.912	1.6	W=	.121846	20.1	T=	20.834 / 14.9
LAT= 0.0	U=	13.257	6.4	V=	13.178	23.4	W=	.155586	20.5	T=	27.869 / 15.1
LAT= 6.0	U=	15.645	6.8	V=	15.483	18.2	W=	.131915	20.2	T=	25.232 / 15.2
LAT= 12.0	U=	21.618	7.4	V=	25.931	17.0	W=	.074259	18.7	T=	15.532 / 15.2
LAT= 18.0	U=	26.899	7.9	V=	29.774	17.1	W=	.063716	14.0	T=	4.314 / 15.2
LAT= 24.0	U=	27.277	8.3	V=	28.349	18.0	W=	.103069	12.1	T=	3.463 / 3.6
LAT= 30.0	U=	22.716	9.0	V=	26.371	19.4	W=	.116172	11.8	T=	5.734 / 3.4
LAT= 36.0	U=	17.197	10.5	V=	27.913	21.0	W=	.102352	11.9	T=	4.049 / 3.2
LAT= 42.0	U=	14.834	12.8	V=	33.241	22.1	W=	.070601	12.3	T=	1.901 / 18.7
LAT= 48.0	U=	17.948	15.4	V=	39.485	22.7	W=	.039289	13.8	T=	6.382 / 16.2
LAT= 54.0	U=	26.549	17.0	V=	45.353	23.0	W=	.028701	17.7	T=	9.971 / 15.4
LAT= 60.0	U=	41.046	17.1	V=	50.098	23.3	W=	.036926	21.4	T=	10.315 / 16.4
LAT= 66.0	U=	49.711	17.2	V=	54.625	23.5	W=	.051219	22.8	T=	11.133 / 17.1
LAT= 72.0	U=	52.909	17.4	V=	59.241	23.7	W=	.058984	23.6	T=	12.131 / 17.4
LAT= 78.0	U=	58.318	17.7	V=	64.166	23.9	W=	.051168	24.0	T=	9.600 / 17.6
Z= 129.367 KM											
LAT=-78.0	U=	14.762	17.8	V=	15.546	12.0	W=	.038916	12.4	T=	1.659 / .9
LAT=-72.0	U=	13.886	17.5	V=	14.811	11.9	W=	.057379	12.4	T=	3.041 / 2.4
LAT=-66.0	U=	13.377	17.5	V=	13.751	11.6	W=	.077375	12.3	T=	5.627 / 3.5
LAT=-60.0	U=	8.015	17.3	V=	11.759	11.3	W=	.093726	12.4	T=	6.208 / 4.5
LAT=-54.0	U=	2.999	7.6	V=	8.741	10.5	W=	.107506	12.7	T=	5.653 / 6.3
LAT=-48.0	U=	3.151	7.8	V=	5.619	8.6	W=	.126226	11.7	T=	10.524 / 3.7
LAT=-42.0	U=	8.517	6.6	V=	6.189	4.1	W=	.148799	11.2	T=	13.164 / 3.2
LAT=-36.0	U=	19.154	6.2	V=	13.089	2.0	W=	.165099	11.2	T=	11.396 / 3.2
LAT=-30.0	U=	24.898	6.2	V=	22.282	1.3	W=	.170702	11.2	T=	12.270 / 2.9
LAT=-24.0	U=	28.468	6.1	V=	31.265	1.0	W=	.155665	11.5	T=	8.556 / 3.2
LAT=-18.0	U=	27.816	5.9	V=	37.235	.9	W=	.125271	13.1	T=	3.433 / 10.0
LAT=-12.0	U=	22.972	5.6	V=	36.612	.7	W=	.127760	15.8	T=	14.467 / 12.9
LAT= -6.0	U=	17.298	5.2	V=	28.577	.5	W=	.176397	17.5	T=	25.785 / 13.2
LAT= 0.0	U=	14.815	4.7	V=	15.787	23.8	W=	.205282	18.0	T=	31.725 / 13.4
LAT= 6.0	U=	16.747	4.8	V=	6.115	20.3	W=	.183735	17.8	T=	29.577 / 13.5
LAT= 12.0	U=	21.109	5.2	V=	9.253	16.5	W=	.131718	16.6	T=	21.561 / 13.9
LAT= 18.0	U=	24.247	5.5	V=	11.200	17.1	W=	.104956	14.1	T=	12.662 / 14.7
LAT= 24.0	U=	22.205	5.7	V=	13.277	19.5	W=	.117972	12.1	T=	7.284 / 16.2
LAT= 30.0	U=	14.911	6.0	V=	20.461	21.5	W=	.120276	11.5	T=	6.307 / 17.4
LAT= 36.0	U=	5.423	8.3	V=	30.582	22.5	W=	.100774	11.5	T=	7.241 / 17.3
LAT= 42.0	U=	7.467	15.5	V=	41.217	23.0	W=	.062330	11.9	T=	11.138 / 16.7
LAT= 48.0	U=	19.296	17.3	V=	50.481	23.2	W=	.025820	14.3	T=	14.000 / 16.1
LAT= 54.0	U=	34.340	18.0	V=	58.376	23.4	W=	.032983	20.4	T=	15.585 / 15.4
LAT= 60.0	U=	51.952	17.6	V=	64.789	23.5	W=	.065085	23.0	T=	14.542 / 16.3
LAT= 66.0	U=	63.105	17.6	V=	70.847	23.7	W=	.089077	23.9	T=	14.437 / 17.0
LAT= 72.0	U=	67.975	17.7	V=	77.104	24.0	W=	.099353	.7	T=	14.788 / 17.4
LAT= 78.0	U=	75.531	18.0	V=	83.793	.2	W=	.082011	.9	T=	11.352 / 17.7

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 135.169 KM

LAT=-78.0	U=	17.842	/ 17.1	V=	18.486	/ 11.3	W=	.058774	/ 12.2	T=	6.994 / 15.8
LAT=-72.0	U=	16.639	/ 17.0	V=	17.566	/ 11.2	W=	.082771	/ 12.3	T=	8.463 / 15.9
LAT=-66.0	U=	15.521	/ 17.0	V=	16.382	/ 11.0	W=	.103400	/ 12.2	T=	7.764 / 16.1
LAT=-60.0	U=	10.071	/ 17.1	V=	14.367	/ 10.8	W=	.121529	/ 12.3	T=	8.256 / 15.6
LAT=-54.0	U=	.881	/ 23.0	V=	11.288	/ 10.5	W=	.137607	/ 12.6	T=	10.305 / 14.8
LAT=-48.0	U=	.915	/ 23.2	V=	7.353	/ 9.9	W=	.148247	/ 11.6	T=	5.852 / 16.7
LAT=-42.0	U=	5.753	/ 3.5	V=	2.325	/ 7.3	W=	.164756	/ 11.1	T=	5.870 / 18.5
LAT=-36.0	U=	16.143	/ 3.9	V=	6.437	/ 23.8	W=	.178986	/ 11.1	T=	7.528 / 17.7
LAT=-30.0	U=	21.434	/ 4.1	V=	14.957	/ 23.1	W=	.183704	/ 11.1	T=	7.477 / 18.1
LAT=-24.0	U=	25.362	/ 4.0	V=	23.596	/ 22.9	W=	.180982	/ 11.6	T=	8.154 / 16.5
LAT=-18.0	U=	26.156	/ 3.8	V=	30.054	/ 22.8	W=	.185945	/ 13.0	T=	14.040 / 14.1
LAT=-12.0	U=	22.789	/ 3.7	V=	31.171	/ 22.9	W=	.220255	/ 14.6	T=	23.855 / 13.0
LAT= -6.0	U=	18.530	/ 3.4	V=	26.581	/ 23.3	W=	.273699	/ 15.6	T=	33.942 / 12.6
LAT= 0.0	U=	16.953	/ 2.9	V=	18.901	/ .2	W=	.300465	/ 16.0	T=	39.448 / 12.6
LAT= 6.0	U=	19.071	/ 2.8	V=	13.578	/ 1.9	W=	.276414	/ 15.9	T=	37.481 / 12.8
LAT= 12.0	U=	22.865	/ 2.8	V=	13.018	/ 3.0	W=	.215246	/ 15.2	T=	30.756 / 13.4
LAT= 18.0	U=	25.114	/ 2.8	V=	14.810	/ 2.4	W=	.158757	/ 13.9	T=	24.222 / 14.4
LAT= 24.0	U=	22.739	/ 2.5	V=	21.330	/ 1.2	W=	.133275	/ 12.4	T=	20.955 / 15.5
LAT= 30.0	U=	16.054	/ 1.5	V=	31.199	/ .3	W=	.117220	/ 11.5	T=	20.087 / 16.1
LAT= 36.0	U=	10.047	/ 22.6	V=	42.291	/ 23.9	W=	.092878	/ 11.3	T=	19.699 / 16.2
LAT= 42.0	U=	14.043	/ 19.4	V=	53.409	/ 23.7	W=	.052244	/ 11.5	T=	21.859 / 16.1
LAT= 48.0	U=	27.229	/ 18.7	V=	63.184	/ 23.7	W=	.009528	/ 14.6	T=	22.689 / 15.8
LAT= 54.0	U=	45.382	/ 18.7	V=	71.752	/ 23.7	W=	.043641	/ 22.9	T=	22.157 / 15.4
LAT= 60.0	U=	63.812	/ 18.0	V=	79.004	/ 23.8	W=	.102559	/ .4	T=	19.233 / 16.2
LAT= 66.0	U=	76.429	/ 17.8	V=	86.093	/ 23.9	W=	.140004	/ .9	T=	17.766 / 17.0
LAT= 72.0	U=	82.550	/ 18.0	V=	93.570	/ .2	W=	.153905	/ 1.4	T=	17.174 / 17.5
LAT= 78.0	U=	91.855	/ 18.2	V=	101.743	/ .4	W=	.122343	/ 1.8	T=	12.908 / 17.8

Z= 141.772 KM

LAT=-78.0	U=	25.276	/ 16.8	V=	25.547	/ 10.8	W=	.088369	/ 12.1	T=	17.207 / 15.1
LAT=-72.0	U=	23.720	/ 16.8	V=	24.240	/ 10.8	W=	.122798	/ 12.1	T=	22.655 / 15.2
LAT=-66.0	U=	21.676	/ 16.8	V=	22.637	/ 10.8	W=	.148246	/ 12.0	T=	24.487 / 15.5
LAT=-60.0	U=	16.118	/ 17.2	V=	20.225	/ 10.7	W=	.171201	/ 12.1	T=	26.469 / 15.4
LAT=-54.0	U=	7.896	/ 19.0	V=	16.820	/ 10.6	W=	.191538	/ 12.2	T=	28.658 / 15.1
LAT=-48.0	U=	7.772	/ 19.2	V=	12.675	/ 10.7	W=	.193693	/ 11.7	T=	25.731 / 15.7
LAT=-42.0	U=	7.715	/ 22.1	V=	7.285	/ 11.2	W=	.201870	/ 11.4	T=	25.833 / 16.0
LAT=-36.0	U=	14.960	/ .8	V=	2.912	/ 16.3	W=	.214375	/ 11.5	T=	28.340 / 15.9
LAT=-30.0	U=	19.640	/ 1.4	V=	9.246	/ 20.4	W=	.218124	/ 11.4	T=	27.795 / 15.9
LAT=-24.0	U=	23.991	/ 1.6	V=	17.313	/ 21.1	W=	.229512	/ 11.9	T=	27.909 / 15.5
LAT=-18.0	U=	26.224	/ 1.7	V=	23.663	/ 21.4	W=	.264346	/ 12.8	T=	29.825 / 14.6
LAT=-12.0	U=	24.110	/ 1.7	V=	25.955	/ 21.9	W=	.322773	/ 13.8	T=	33.889 / 13.5
LAT= -6.0	U=	21.254	/ 1.6	V=	24.259	/ 22.7	W=	.385926	/ 14.4	T=	39.904 / 12.7
LAT= 0.0	U=	20.686	/ 1.3	V=	22.116	/ .2	W=	.412001	/ 14.7	T=	44.030 / 12.5
LAT= 6.0	U=	23.157	/ 1.1	V=	23.671	/ 1.6	W=	.379433	/ 14.7	T=	43.163 / 12.8
LAT= 12.0	U=	27.136	/ .9	V=	27.870	/ 2.2	W=	.303392	/ 14.3	T=	39.999 / 13.5
LAT= 18.0	U=	29.816	/ .6	V=	32.648	/ 1.9	W=	.222536	/ 13.5	T=	37.824 / 14.4
LAT= 24.0	U=	29.195	/ .1	V=	39.149	/ 1.3	W=	.166411	/ 12.6	T=	36.808 / 15.0
LAT= 30.0	U=	25.919	/ 23.1	V=	47.317	/ .7	W=	.130638	/ 11.9	T=	35.678 / 15.3
LAT= 36.0	U=	24.022	/ 21.4	V=	56.604	/ .2	W=	.099621	/ 11.5	T=	33.714 / 15.4
LAT= 42.0	U=	26.541	/ 20.1	V=	66.555	/ 0.0	W=	.057953	/ 11.4	T=	33.765 / 15.5
LAT= 48.0	U=	38.423	/ 19.3	V=	75.913	/ 23.9	W=	.010351	/ 8.6	T=	32.347 / 15.4
LAT= 54.0	U=	57.859	/ 19.0	V=	84.648	/ 23.9	W=	.057445	/ 1.0	T=	29.602 / 15.2
LAT= 60.0	U=	76.018	/ 18.1	V=	92.342	/ 0.0	W=	.149159	/ 1.3	T=	24.416 / 16.0
LAT= 66.0	U=	89.525	/ 17.9	V=	100.234	/ .2	W=	.204993	/ 1.7	T=	21.145 / 16.8
LAT= 72.0	U=	96.625	/ 18.1	V=	108.589	/ .4	W=	.226406	/ 2.1	T=	19.286 / 17.5
LAT= 78.0	U=	107.482	/ 18.3	V=	118.100	/ .5	W=	.177322	/ 2.5	T=	14.265 / 17.9

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 149.425 KM

LAT=-78.0	U=	36.907	/	16.8	V=	36.627	/	10.7	W=	.129195	/ 11.9	T=	27.085	/	14.9
LAT=-72.0	U=	34.909	/	17.0	V=	34.463	/	10.8	W=	.180988	/ 11.9	T=	37.024	/	15.0
LAT=-66.0	U=	31.620	/	17.2	V=	31.886	/	10.8	W=	.217744	/ 11.9	T=	41.920	/	15.2
LAT=-60.0	U=	25.902	/	17.6	V=	28.601	/	10.8	W=	.249392	/ 11.9	T=	45.491	/	15.2
LAT=-54.0	U=	18.961	/	18.9	V=	24.525	/	10.9	W=	.275528	/ 12.1	T=	47.740	/	15.1
LAT=-48.0	U=	17.604	/	18.9	V=	20.111	/	11.1	W=	.270460	/ 11.7	T=	46.156	/	15.3
LAT=-42.0	U=	16.569	/	20.3	V=	15.262	/	11.7	W=	.272403	/ 11.6	T=	46.917	/	15.5
LAT=-36.0	U=	20.896	/	22.4	V=	10.965	/	13.2	W=	.284162	/ 11.8	T=	49.578	/	15.4
LAT=-30.0	U=	23.926	/	23.2	V=	9.738	/	15.9	W=	.284271	/ 11.8	T=	49.053	/	15.3
LAT=-24.0	U=	27.687	/	23.7	V=	13.224	/	18.2	W=	.307229	/ 12.1	T=	48.431	/	15.1
LAT=-18.0	U=	30.325	/	24.0	V=	17.593	/	19.5	W=	.366218	/ 12.6	T=	47.820	/	14.7
LAT=-12.0	U=	28.664	/	.2	V=	19.736	/	20.7	W=	.442207	/ 13.2	T=	47.013	/	14.0
LAT= -6.0	U=	26.515	/	.2	V=	20.787	/	22.3	W=	.512018	/ 13.5	T=	47.844	/	13.5
LAT= 0.0	U=	26.488	/	.1	V=	24.735	/	.1	W=	.534805	/ 13.7	T=	49.598	/	13.2
LAT= 6.0	U=	29.024	/	23.9	V=	32.273	/	1.1	W=	.493251	/ 13.7	T=	50.536	/	13.5
LAT= 12.0	U=	33.245	/	23.7	V=	40.733	/	1.5	W=	.402259	/ 13.6	T=	51.598	/	13.9
LAT= 18.0	U=	36.630	/	23.4	V=	48.512	/	1.4	W=	.300128	/ 13.2	T=	53.063	/	14.4
LAT= 24.0	U=	37.427	/	22.8	V=	55.301	/	1.1	W=	.219570	/ 12.7	T=	53.236	/	14.7
LAT= 30.0	U=	36.105	/	22.0	V=	62.582	/	.7	W=	.167302	/ 12.2	T=	51.424	/	14.8
LAT= 36.0	U=	35.558	/	20.9	V=	70.500	/	.5	W=	.130429	/ 11.8	T=	47.719	/	14.9
LAT= 42.0	U=	37.963	/	20.2	V=	79.216	/	.3	W=	.087830	/ 11.2	T=	45.623	/	15.0
LAT= 48.0	U=	49.545	/	19.5	V=	87.982	/	.3	W=	.042089	/ 8.5	T=	42.117	/	15.0
LAT= 54.0	U=	70.102	/	19.2	V=	96.758	/	.3	W=	.080844	/ 3.1	T=	37.418	/	14.9
LAT= 60.0	U=	87.809	/	18.3	V=	104.750	/	.3	W=	.204200	/ 2.1	T=	29.811	/	15.7
LAT= 66.0	U=	101.891	/	18.0	V=	113.222	/	.4	W=	.282948	/ 2.2	T=	24.521	/	16.6
LAT= 72.0	U=	109.799	/	18.1	V=	122.301	/	.5	W=	.314702	/ 2.5	T=	20.989	/	17.5
LAT= 78.0	U=	122.113	/	18.3	V=	132.985	/	.6	W=	.245919	/ 2.9	T=	15.316	/	18.0

Z= 158.420 KM

LAT=-78.0	U=	51.064	/	17.1	V=	49.857	/	10.8	W=	.177520	/ 11.9	T=	34.482	/	14.8
LAT=-72.0	U=	49.030	/	17.4	V=	46.757	/	11.0	W=	.255405	/ 11.9	T=	48.879	/	14.9
LAT=-66.0	U=	44.728	/	17.5	V=	43.039	/	11.1	W=	.313061	/ 11.8	T=	57.684	/	15.0
LAT=-60.0	U=	38.862	/	18.0	V=	38.674	/	11.1	W=	.360041	/ 11.9	T=	63.249	/	15.1
LAT=-54.0	U=	32.825	/	18.9	V=	33.666	/	11.2	W=	.395653	/ 12.0	T=	65.573	/	15.0
LAT=-48.0	U=	29.857	/	19.0	V=	28.697	/	11.4	W=	.385974	/ 11.8	T=	65.264	/	15.2
LAT=-42.0	U=	28.370	/	19.7	V=	23.785	/	11.8	W=	.385702	/ 11.8	T=	66.832	/	15.2
LAT=-36.0	U=	31.160	/	21.1	V=	19.308	/	12.5	W=	.400932	/ 11.9	T=	69.886	/	15.1
LAT=-30.0	U=	32.205	/	21.7	V=	15.862	/	13.8	W=	.398037	/ 12.0	T=	69.344	/	15.0
LAT=-24.0	U=	34.483	/	22.2	V=	14.246	/	15.5	W=	.426325	/ 12.2	T=	68.370	/	14.9
LAT=-18.0	U=	36.687	/	22.7	V=	14.022	/	17.4	W=	.497641	/ 12.4	T=	66.510	/	14.7
LAT=-12.0	U=	34.990	/	23.0	V=	14.020	/	19.6	W=	.580672	/ 12.7	T=	62.842	/	14.3
LAT= -6.0	U=	33.249	/	23.2	V=	17.435	/	22.2	W=	.652055	/ 12.8	T=	60.474	/	14.0
LAT= 0.0	U=	33.499	/	23.2	V=	26.442	/	23.9	W=	.670381	/ 12.9	T=	60.589	/	13.8
LAT= 6.0	U=	35.779	/	23.0	V=	38.093	/	.7	W=	.617475	/ 12.9	T=	62.675	/	13.9
LAT= 12.0	U=	39.786	/	22.7	V=	49.341	/	1.0	W=	.511998	/ 12.9	T=	65.916	/	14.1
LAT= 18.0	U=	43.481	/	22.4	V=	58.858	/	1.0	W=	.394159	/ 12.8	T=	69.086	/	14.3
LAT= 24.0	U=	45.274	/	21.9	V=	66.653	/	.9	W=	.297872	/ 12.6	T=	69.511	/	14.4
LAT= 30.0	U=	45.600	/	21.3	V=	73.751	/	.7	W=	.233757	/ 12.3	T=	66.786	/	14.5
LAT= 36.0	U=	46.116	/	20.6	V=	80.940	/	.6	W=	.192181	/ 11.8	T=	61.335	/	14.5
LAT= 42.0	U=	48.674	/	20.1	V=	89.189	/	.5	W=	.149375	/ 11.0	T=	57.482	/	14.7
LAT= 48.0	U=	60.383	/	19.6	V=	98.052	/	.4	W=	.102388	/ 8.9	T=	52.203	/	14.7
LAT= 54.0	U=	81.815	/	19.2	V=	107.439	/	.4	W=	.125581	/ 4.9	T=	45.745	/	14.7
LAT= 60.0	U=	98.937	/	18.4	V=	116.024	/	.4	W=	.267266	/ 2.8	T=	35.882	/	15.3
LAT= 66.0	U=	113.174	/	18.1	V=	125.158	/	.5	W=	.371192	/ 2.5	T=	27.828	/	16.2
LAT= 72.0	U=	121.744	/	18.1	V=	134.912	/	.6	W=	.415401	/ 2.7	T=	22.362	/	17.4
LAT= 78.0	U=	135.401	/	18.3	V=	146.734	/	.7	W=	.325751	/ 3.1	T=	16.205	/	18.1

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 181.310 KM

LAT=-78.0	U=	80.261	/ 17.7	V=	76.287	/ 11.4	W=	.259444	/ 12.0	T=	38.310	/ 14.8
LAT=-72.0	U=	79.770	/ 18.0	V=	72.160	/ 11.5	W=	.417255	/ 11.8	T=	58.472	/ 14.9
LAT=-66.0	U=	75.395	/ 18.4	V=	66.827	/ 11.6	W=	.554443	/ 11.8	T=	77.137	/ 14.9
LAT=-60.0	U=	69.789	/ 18.7	V=	60.618	/ 11.7	W=	.657183	/ 11.8	T=	88.112	/ 14.9
LAT=-54.0	U=	63.161	/ 19.1	V=	53.648	/ 11.9	W=	.724098	/ 11.8	T=	91.468	/ 14.9
LAT=-48.0	U=	55.312	/ 19.2	V=	46.852	/ 12.1	W=	.713806	/ 11.8	T=	93.088	/ 14.9
LAT=-42.0	U=	51.498	/ 19.5	V=	40.604	/ 12.2	W=	.719092	/ 11.9	T=	97.194	/ 14.9
LAT=-36.0	U=	52.637	/ 20.2	V=	34.957	/ 12.4	W=	.749187	/ 12.1	T=	103.379	/ 14.8
LAT=-30.0	U=	49.813	/ 20.5	V=	29.394	/ 12.6	W=	.738673	/ 12.2	T=	102.662	/ 14.7
LAT=-24.0	U=	48.905	/ 20.9	V=	23.486	/ 13.0	W=	.770005	/ 12.1	T=	102.120	/ 14.7
LAT=-18.0	U=	49.461	/ 21.4	V=	16.221	/ 13.7	W=	.857886	/ 11.9	T=	101.054	/ 14.6
LAT=-12.0	U=	47.265	/ 21.8	V=	7.527	/ 16.1	W=	.952358	/ 11.7	T=	95.161	/ 14.5
LAT= -6.0	U=	45.956	/ 22.1	V=	11.859	/ 22.3	W=	1.030801	/ 11.6	T=	90.335	/ 14.4
LAT= 0.0	U=	46.332	/ 22.1	V=	27.284	/ 23.6	W=	1.040109	/ 11.5	T=	88.953	/ 14.3
LAT= 6.0	U=	47.405	/ 21.9	V=	43.552	/ .1	W=	.957528	/ 11.6	T=	91.027	/ 14.2
LAT= 12.0	U=	50.054	/ 21.6	V=	57.819	/ .3	W=	.812102	/ 11.6	T=	95.078	/ 14.2
LAT= 18.0	U=	53.305	/ 21.3	V=	68.826	/ .4	W=	.655542	/ 11.7	T=	98.730	/ 14.2
LAT= 24.0	U=	56.078	/ 20.9	V=	76.965	/ .5	W=	.529631	/ 11.8	T=	97.589	/ 14.2
LAT= 30.0	U=	58.210	/ 20.6	V=	84.240	/ .5	W=	.450045	/ 11.7	T=	92.561	/ 14.2
LAT= 36.0	U=	60.589	/ 20.2	V=	91.816	/ .6	W=	.406445	/ 11.2	T=	84.295	/ 14.2
LAT= 42.0	U=	65.159	/ 20.1	V=	101.210	/ .7	W=	.371141	/ 10.6	T=	78.043	/ 14.4
LAT= 48.0	U=	78.144	/ 19.8	V=	111.848	/ .7	W=	.307392	/ 9.2	T=	70.318	/ 14.4
LAT= 54.0	U=	100.922	/ 19.3	V=	123.651	/ .6	W=	.290519	/ 6.5	T=	61.465	/ 14.4
LAT= 60.0	U=	116.129	/ 18.5	V=	134.403	/ .6	W=	.417096	/ 3.6	T=	47.382	/ 14.8
LAT= 66.0	U=	130.135	/ 18.1	V=	145.407	/ .6	W=	.568606	/ 2.7	T=	34.096	/ 15.6
LAT= 72.0	U=	139.173	/ 18.1	V=	156.711	/ .8	W=	.646667	/ 2.5	T=	23.798	/ 17.3
LAT= 78.0	U=	155.820	/ 18.4	V=	170.673	/ .9	W=	.517671	/ 2.7	T=	16.900	/ 18.1

Z= 209.865 KM

LAT=-78.0	U=	99.311	/ 18.3	V=	93.559	/ 11.9	W=	.263363	/ 11.9	T=	33.173	/ 15.2
LAT=-72.0	U=	101.779	/ 18.6	V=	90.275	/ 12.1	W=	.522628	/ 11.7	T=	53.211	/ 15.2
LAT=-66.0	U=	100.075	/ 18.9	V=	85.094	/ 12.2	W=	.780919	/ 11.6	T=	78.068	/ 15.0
LAT=-60.0	U=	94.756	/ 19.2	V=	78.363	/ 12.3	W=	.968562	/ 11.6	T=	93.437	/ 14.9
LAT=-54.0	U=	86.016	/ 19.5	V=	70.163	/ 12.4	W=	1.084273	/ 11.6	T=	99.353	/ 14.8
LAT=-48.0	U=	73.260	/ 19.5	V=	61.618	/ 12.5	W=	1.089017	/ 11.7	T=	101.424	/ 14.9
LAT=-42.0	U=	66.236	/ 19.6	V=	53.241	/ 12.6	W=	1.119749	/ 11.8	T=	108.883	/ 14.8
LAT=-36.0	U=	65.167	/ 19.9	V=	45.093	/ 12.6	W=	1.184859	/ 11.9	T=	121.442	/ 14.6
LAT=-30.0	U=	58.001	/ 20.1	V=	36.846	/ 12.5	W=	1.168767	/ 12.0	T=	120.344	/ 14.6
LAT=-24.0	U=	54.219	/ 20.4	V=	28.289	/ 12.4	W=	1.196430	/ 11.8	T=	121.489	/ 14.6
LAT=-18.0	U=	53.545	/ 20.8	V=	18.501	/ 12.1	W=	1.285962	/ 11.5	T=	124.186	/ 14.7
LAT=-12.0	U=	51.213	/ 21.1	V=	5.972	/ 12.2	W=	1.366831	/ 11.2	T=	117.645	/ 14.6
LAT= -6.0	U=	50.345	/ 21.4	V=	9.169	/ 23.7	W=	1.435405	/ 10.9	T=	112.238	/ 14.5
LAT= 0.0	U=	50.897	/ 21.5	V=	25.985	/ 23.7	W=	1.433697	/ 10.7	T=	110.479	/ 14.5
LAT= 6.0	U=	51.177	/ 21.3	V=	42.299	/ 23.8	W=	1.340734	/ 10.7	T=	112.207	/ 14.4
LAT= 12.0	U=	52.776	/ 21.0	V=	56.334	/ 23.9	W=	1.182434	/ 10.8	T=	115.856	/ 14.3
LAT= 18.0	U=	55.634	/ 20.7	V=	67.272	/ .1	W=	1.014492	/ 10.9	T=	118.908	/ 14.3
LAT= 24.0	U=	59.167	/ 20.4	V=	75.806	/ .3	W=	.880024	/ 11.1	T=	115.278	/ 14.2
LAT= 30.0	U=	63.233	/ 20.2	V=	84.285	/ .5	W=	.796240	/ 11.0	T=	108.101	/ 14.2
LAT= 36.0	U=	69.090	/ 20.1	V=	93.631	/ .6	W=	.752123	/ 10.6	T=	98.039	/ 14.2
LAT= 42.0	U=	75.532	/ 20.2	V=	105.588	/ .7	W=	.714533	/ 10.1	T=	90.553	/ 14.2
LAT= 48.0	U=	90.274	/ 19.9	V=	118.967	/ .8	W=	.612779	/ 9.1	T=	81.751	/ 14.3
LAT= 54.0	U=	113.601	/ 19.5	V=	133.664	/ .8	W=	.528194	/ 7.0	T=	72.039	/ 14.3
LAT= 60.0	U=	126.742	/ 18.7	V=	146.846	/ .7	W=	.589075	/ 3.9	T=	54.338	/ 14.6
LAT= 66.0	U=	139.527	/ 18.3	V=	159.804	/ .7	W=	.784712	/ 2.5	T=	37.370	/ 15.4
LAT= 72.0	U=	148.055	/ 18.2	V=	172.612	/ .9	W=	.904850	/ 2.1	T=	24.145	/ 17.3
LAT= 78.0	U=	167.259	/ 18.5	V=	188.193	/ 1.0	W=	.744094	/ 2.2	T=	16.948	/ 18.2

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 240.988 KM

LAT=-78.0	U= 108.395 / 18.7	V= 103.441 / 12.3	W= .230456 / 11.2	T= 28.465 / 15.7
LAT=-72.0	U= 113.408 / 19.0	V= 101.686 / 12.5	W= .583475 / 11.5	T= 46.150 / 15.7
LAT=-66.0	U= 114.830 / 19.2	V= 97.421 / 12.6	W= .967603 / 11.6	T= 71.203 / 15.4
LAT=-60.0	U= 110.234 / 19.4	V= 90.889 / 12.7	W= 1.244078 / 11.6	T= 87.689 / 15.3
LAT=-54.0	U= 99.583 / 19.6	V= 82.123 / 12.8	W= 1.411755 / 11.5	T= 95.566 / 15.1
LAT=-48.0	U= 83.123 / 19.6	V= 72.426 / 12.9	W= 1.437605 / 11.7	T= 97.299 / 15.2
LAT=-42.0	U= 73.245 / 19.7	V= 62.492 / 12.9	W= 1.503079 / 11.8	T= 107.591 / 15.0
LAT=-36.0	U= 69.967 / 19.8	V= 52.381 / 12.8	W= 1.612555 / 11.7	T= 126.370 / 14.8
LAT=-30.0	U= 59.336 / 19.9	V= 42.094 / 12.5	W= 1.594666 / 11.7	T= 125.084 / 14.8
LAT=-24.0	U= 53.259 / 20.1	V= 31.764 / 12.1	W= 1.632336 / 11.5	T= 128.167 / 14.8
LAT=-18.0	U= 51.839 / 20.4	V= 20.924 / 11.4	W= 1.743334 / 11.2	T= 135.052 / 14.7
LAT=-12.0	U= 49.730 / 20.8	V= 8.311 / 10.0	W= 1.818152 / 10.9	T= 128.644 / 14.7
LAT= -6.0	U= 49.574 / 21.1	V= 8.510 / 1.2	W= 1.881086 / 10.6	T= 123.374 / 14.7
LAT= 0.0	U= 50.658 / 21.2	V= 24.433 / 23.9	W= 1.876753 / 10.4	T= 121.823 / 14.5
LAT= 6.0	U= 51.049 / 21.0	V= 40.282 / 23.7	W= 1.777350 / 10.3	T= 123.608 / 14.4
LAT= 12.0	U= 52.455 / 20.7	V= 54.027 / 23.7	W= 1.613508 / 10.4	T= 127.127 / 14.3
LAT= 18.0	U= 55.302 / 20.4	V= 64.958 / 23.9	W= 1.440881 / 10.4	T= 129.898 / 14.3
LAT= 24.0	U= 59.846 / 20.2	V= 74.063 / .2	W= 1.289352 / 10.5	T= 124.158 / 14.2
LAT= 30.0	U= 65.885 / 20.1	V= 83.854 / .5	W= 1.191114 / 10.4	T= 115.576 / 14.1
LAT= 36.0	U= 73.390 / 20.1	V= 95.022 / .7	W= 1.133955 / 10.2	T= 104.792 / 14.1
LAT= 42.0	U= 83.341 / 20.2	V= 109.380 / .8	W= 1.080986 / 9.8	T= 96.284 / 14.3
LAT= 48.0	U= 99.507 / 20.0	V= 125.000 / .8	W= .933296 / 8.9	T= 87.0[illegible] / 14.3
LAT= 54.0	U= 123.122 / 19.6	V= 141.820 / .8	W= .785398 / 7.0	T= 77.360 / 14.3
LAT= 60.0	U= 134.408 / 18.8	V= 156.551 / .8	W= .774849 / 3.9	T= 56.687 / 14.6
LAT= 66.0	U= 145.933 / 18.4	V= 170.737 / .8	W= 1.008744 / 2.4	T= 38.256 / 15.4
LAT= 72.0	U= 153.557 / 18.3	V= 184.366 / .9	W= 1.165878 / 1.8	T= 24.760 / 17.2
LAT= 78.0	U= 174.522 / 18.6	V= 200.864 / 1.1	W= .972409 / 1.8	T= 17.272 / 18.1

Z= 272.801 KM

LAT=-78.0	U= 115.554 / 18.9	V= 112.027 / 12.6	W= .228591 / 10.8	T= 26.449 / 16.1
LAT=-72.0	U= 122.041 / 19.2	V= 111.229 / 12.7	W= .652743 / 11.5	T= 42.363 / 16.2
LAT=-66.0	U= 126.014 / 19.4	V= 107.603 / 12.9	W= 1.148129 / 11.6	T= 65.917 / 16.0
LAT=-60.0	U= 122.021 / 19.6	V= 101.336 / 13.0	W= 1.507243 / 11.6	T= 81.971 / 15.7
LAT=-54.0	U= 109.994 / 19.8	V= 92.269 / 13.1	W= 1.729105 / 11.5	T= 90.839 / 15.4
LAT=-48.0	U= 90.885 / 19.8	V= 81.968 / 13.1	W= 1.780818 / 11.6	T= 92.510 / 15.6
LAT=-42.0	U= 78.999 / 19.8	V= 71.047 / 13.1	W= 1.889554 / 11.6	T= 104.208 / 15.4
LAT=-36.0	U= 74.352 / 19.9	V= 59.557 / 13.0	W= 2.060909 / 11.6	T= 126.838 / 14.9
LAT=-30.0	U= 60.892 / 19.9	V= 47.761 / 12.7	W= 2.047734 / 11.5	T= 125.665 / 14.9
LAT=-24.0	U= 53.278 / 20.0	V= 35.852 / 12.3	W= 2.099574 / 11.3	T= 130.048 / 14.9
LAT=-18.0	U= 51.680 / 20.3	V= 23.557 / 11.6	W= 2.237908 / 11.0	T= 139.425 / 14.8
LAT=-12.0	U= 49.926 / 20.6	V= 10.112 / 10.2	W= 2.306970 / 10.7	T= 133.347 / 14.8
LAT= -6.0	U= 50.210 / 20.9	V= 7.727 / 1.9	W= 2.364367 / 10.4	T= 128.454 / 14.8
LAT= 0.0	U= 51.728 / 21.0	V= 23.497 / .1	W= 2.351505 / 10.2	T= 127.297 / 14.6
LAT= 6.0	U= 52.543 / 20.8	V= 39.371 / 23.8	W= 2.252100 / 10.1	T= 129.345 / 14.5
LAT= 12.0	U= 54.226 / 20.5	V= 53.315 / 23.9	W= 2.087484 / 10.2	T= 132.976 / 14.4
LAT= 18.0	U= 57.463 / 20.2	V= 64.723 / 0.0	W= 1.912295 / 10.2	T= 135.738 / 14.4
LAT= 24.0	U= 62.530 / 20.2	V= 74.927 / .3	W= 1.735082 / 10.2	T= 128.331 / 14.3
LAT= 30.0	U= 69.777 / 20.2	V= 86.118 / .6	W= 1.612842 / 10.1	T= 118.847 / 14.2
LAT= 36.0	U= 79.091 / 20.2	V= 98.792 / .7	W= 1.531519 / 9.9	T= 107.916 / 14.2
LAT= 42.0	U= 90.853 / 20.3	V= 114.624 / .9	W= 1.455082 / 9.5	T= 98.321 / 14.4
LAT= 48.0	U= 107.939 / 20.0	V= 131.678 / .9	W= 1.259091 / 8.7	T= 88.739 / 14.4
LAT= 54.0	U= 131.714 / 19.6	V= 149.901 / .8	W= 1.057140 / 7.0	T= 79.485 / 14.3
LAT= 60.0	U= 141.690 / 18.9	V= 165.560 / .8	W= .985746 / 4.0	T= 58.189 / 14.7
LAT= 66.0	U= 151.940 / 18.5	V= 180.325 / .8	W= 1.240891 / 2.3	T= 39.412 / 15.5
LAT= 72.0	U= 158.861 / 18.4	V= 194.388 / 1.0	W= 1.432173 / 1.6	T= 25.609 / 17.2
LAT= 78.0	U= 181.043 / 18.7	V= 211.670 / 1.1	W= 1.195765 / 1.6	T= 17.776 / 18.0

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 304.762 KM

LAT=-78.0	U=	123.654	/	19.1	V=	120.323	/	12.7	W=	.248314	/ 10.9	T=	26.040	/	16.2
LAT=-72.0	U=	130.721	/	19.3	V=	120.053	/	12.9	W=	.739488	/ 11.6	T=	41.483	/	16.4
LAT=-66.0	U=	136.400	/	19.6	V=	116.920	/	13.0	W=	1.339194	/ 11.6	T=	64.598	/	16.2
LAT=-60.0	U=	133.010	/	19.8	V=	110.809	/	13.1	W=	1.779700	/ 11.6	T=	80.310	/	16.0
LAT=-54.0	U=	119.968	/	19.8	V=	101.710	/	13.2	W=	2.060535	/ 11.5	T=	89.018	/	15.7
LAT=-48.0	U=	98.825	/	19.9	V=	91.018	/	13.2	W=	2.146478	/ 11.6	T=	90.829	/	15.8
LAT=-42.0	U=	85.747	/	19.9	V=	79.403	/	13.2	W=	2.305739	/ 11.5	T=	103.173	/	15.5
LAT=-36.0	U=	80.707	/	19.9	V=	66.948	/	13.0	W=	2.545006	/ 11.4	T=	126.982	/	15.1
LAT=-30.0	U=	65.596	/	19.9	V=	53.748	/	12.8	W=	2.535262	/ 11.4	T=	126.076	/	15.1
LAT=-24.0	U=	57.022	/	20.0	V=	40.251	/	12.4	W=	2.600913	/ 11.2	T=	131.110	/	15.1
LAT=-18.0	U=	55.142	/	20.2	V=	26.288	/	11.8	W=	2.761854	/ 10.9	T=	141.524	/	15.0
LAT=-12.0	U=	53.074	/	20.5	V=	11.515	/	10.6	W=	2.810664	/ 10.6	T=	135.786	/	14.9
LAT= -6.0	U=	53.228	/	20.8	V=	7.081	/	2.3	W=	2.849728	/ 10.4	T=	131.243	/	14.9
LAT= 0.0	U=	54.887	/	20.9	V=	23.118	/	.3	W=	2.826795	/ 10.2	T=	130.433	/	14.7
LAT= 6.0	U=	56.179	/	20.7	V=	39.219	/	24.0	W=	2.733999	/ 10.1	T=	132.748	/	14.7
LAT= 12.0	U=	58.412	/	20.5	V=	53.745	/	24.0	W=	2.579288	/ 10.1	T=	136.551	/	14.6
LAT= 18.0	U=	62.040	/	20.3	V=	66.102	/	.1	W=	2.411602	/ 10.0	T=	139.406	/	14.5
LAT= 24.0	U=	67.975	/	20.1	V=	77.269	/	.4	W=	2.208615	/ 10.0	T=	131.146	/	14.4
LAT= 30.0	U=	75.987	/	20.1	V=	89.549	/	.7	W=	2.055098	/ 9.9	T=	121.187	/	14.3
LAT= 36.0	U=	85.986	/	20.2	V=	103.334	/	.8	W=	1.941979	/ 9.7	T=	110.153	/	14.3
LAT= 42.0	U=	98.335	/	20.4	V=	120.453	/	.9	W=	1.842032	/ 9.4	T=	100.571	/	14.5
LAT= 48.0	U=	115.778	/	20.1	V=	138.592	/	.9	W=	1.590581	/ 8.6	T=	90.981	/	14.5
LAT= 54.0	U=	139.782	/	19.7	V=	157.786	/	.8	W=	1.342264	/ 6.9	T=	81.761	/	14.3
LAT= 60.0	U=	148.553	/	18.9	V=	174.110	/	.8	W=	1.210737	/ 4.0	T=	60.074	/	14.7
LAT= 66.0	U=	158.388	/	18.5	V=	189.319	/	.8	W=	1.482286	/ 2.3	T=	40.820	/	15.5
LAT= 72.0	U=	164.588	/	18.4	V=	203.624	/	1.0	W=	1.699426	/ 1.5	T=	26.559	/	17.2
LAT= 78.0	U=	187.731	/	18.7	V=	221.370	/	1.2	W=	1.410174	/ 1.5	T=	18.453	/	18.0

Z= 336.754 KM

LAT=-78.0	U=	131.773	/	19.2	V=	128.077	/	12.9	W=	.284623	/ 11.4	T=	26.264	/	16.3
LAT=-72.0	U=	139.256	/	19.4	V=	128.066	/	13.0	W=	.845894	/ 11.7	T=	41.922	/	16.6
LAT=-66.0	U=	146.257	/	19.6	V=	125.299	/	13.1	W=	1.549080	/ 11.6	T=	65.344	/	16.4
LAT=-60.0	U=	142.938	/	19.8	V=	119.413	/	13.2	W=	2.070567	/ 11.6	T=	81.296	/	16.1
LAT=-54.0	U=	129.057	/	19.9	V=	110.317	/	13.2	W=	2.409770	/ 11.5	T=	90.091	/	15.8
LAT=-48.0	U=	106.279	/	19.9	V=	99.354	/	13.2	W=	2.528191	/ 11.6	T=	92.038	/	15.9
LAT=-42.0	U=	92.229	/	19.9	V=	87.109	/	13.2	W=	2.733994	/ 11.5	T=	104.780	/	15.6
LAT=-36.0	U=	86.908	/	19.9	V=	73.609	/	13.2	W=	3.038596	/ 11.3	T=	129.281	/	15.2
LAT=-30.0	U=	70.300	/	19.9	V=	59.340	/	12.9	W=	3.028999	/ 11.2	T=	128.548	/	15.2
LAT=-24.0	U=	60.917	/	20.0	V=	44.564	/	12.6	W=	3.110620	/ 11.1	T=	133.942	/	15.1
LAT=-18.0	U=	58.936	/	20.2	V=	28.908	/	12.0	W=	3.303784	/ 10.8	T=	145.079	/	15.0
LAT=-12.0	U=	56.835	/	20.5	V=	12.611	/	11.0	W=	3.344580	/ 10.6	T=	139.487	/	14.9
LAT= -6.0	U=	56.927	/	20.7	V=	6.434	/	2.5	W=	3.377489	/ 10.3	T=	135.206	/	14.9
LAT= 0.0	U=	58.679	/	20.8	V=	23.135	/	.4	W=	3.350243	/ 10.2	T=	134.660	/	14.8
LAT= 6.0	U=	60.252	/	20.6	V=	39.851	/	.1	W=	3.262380	/ 10.0	T=	137.044	/	14.7
LAT= 12.0	U=	62.827	/	20.4	V=	55.241	/	0.0	W=	3.105220	/ 9.9	T=	140.966	/	14.5
LAT= 18.0	U=	66.818	/	20.2	V=	68.695	/	.2	W=	2.925621	/ 9.9	T=	143.822	/	14.5
LAT= 24.0	U=	72.928	/	20.1	V=	80.735	/	.4	W=	2.683402	/ 9.9	T=	135.188	/	14.5
LAT= 30.0	U=	81.332	/	20.2	V=	93.838	/	.7	W=	2.494057	/ 9.8	T=	124.848	/	14.4
LAT= 36.0	U=	91.967	/	20.2	V=	108.379	/	.8	W=	2.348895	/ 9.5	T=	113.516	/	14.3
LAT= 42.0	U=	104.842	/	20.4	V=	126.332	/	.9	W=	2.222836	/ 9.2	T=	103.757	/	14.5
LAT= 48.0	U=	122.702	/	20.2	V=	145.300	/	.9	W=	1.929302	/ 8.5	T=	93.992	/	14.5
LAT= 54.0	U=	147.131	/	19.7	V=	165.329	/	.8	W=	1.636324	/ 6.9	T=	84.599	/	14.3
LAT= 60.0	U=	155.508	/	19.0	V=	182.245	/	.8	W=	1.436219	/ 4.0	T=	62.267	/	14.7
LAT= 66.0	U=	164.606	/	18.6	V=	197.864	/	.8	W=	1.724300	/ 2.2	T=	42.375	/	15.5
LAT= 72.0	U=	170.627	/	18.4	V=	212.407	/	1.0	W=	1.955579	/ 1.4	T=	27.589	/	17.2
LAT= 78.0	U=	194.647	/	18.7	V=	230.675	/	1.2	W=	1.610034	/ 1.4	T=	19.179	/	18.0

Table B2. Amplitude and Phase of Solar Diurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the December Solstice (Contd)

Z= 368.753 KM

LAT=-78.0	U= 139.434 / 19.3	V= 134.964 / 12.9	W= .341208 / 11.8	T= 26.955 / 16.3
LAT=-72.0	U= 147.155 / 19.5	V= 135.202 / 13.1	W= .975147 / 11.8	T= 43.025 / 16.6
LAT=-66.0	U= 154.983 / 19.8	V= 132.757 / 13.1	W= 1.782068 / 11.6	T= 67.128 / 16.4
LAT=-60.0	U= 151.757 / 19.9	V= 126.899 / 13.2	W= 2.382855 / 11.6	T= 83.492 / 16.2
LAT=-54.0	U= 137.121 / 19.9	V= 117.733 / 13.3	W= 2.776114 / 11.5	T= 92.531 / 15.9
LAT=-48.0	U= 112.926 / 19.9	V= 106.390 / 13.3	W= 2.921504 / 11.6	T= 94.632 / 16.0
LAT=-42.0	U= 98.080 / 19.9	V= 93.568 / 13.3	W= 3.172064 / 11.5	T= 107.659 / 15.7
LAT=-36.0	U= 92.587 / 19.9	V= 79.327 / 13.2	W= 3.540641 / 11.3	T= 133.113 / 15.2
LAT=-30.0	U= 74.752 / 20.0	V= 60.747 / 13.0	W= 3.526326 / 11.1	T= 132.404 / 15.2
LAT=-24.0	U= 64.853 / 20.0	V= 47.752 / 12.7	W= 3.624218 / 11.0	T= 138.202 / 15.2
LAT=-18.0	U= 62.983 / 20.2	V= 31.372 / 12.1	W= 3.851680 / 10.7	T= 149.955 / 15.1
LAT=-12.0	U= 60.495 / 20.5	V= 13.869 / 11.2	W= 3.885916 / 10.5	T= 144.515 / 15.1
LAT= -6.0	U= 60.515 / 20.7	V= 6.028 / 2.5	W= 3.913953 / 10.3	T= 140.307 / 15.0
LAT= 0.0	U= 62.355 / 20.8	V= 23.453 / .4	W= 3.883231 / 10.1	T= 139.857 / 14.8
LAT= 6.0	U= 64.081 / 20.6	V= 40.933 / .1	W= 3.795316 / 9.9	T= 142.432 / 14.8
LAT= 12.0	U= 66.830 / 20.4	V= 56.931 / .1	W= 3.633593 / 9.9	T= 146.250 / 14.6
LAT= 18.0	U= 71.022 / 20.2	V= 70.929 / .3	W= 3.444517 / 9.9	T= 149.067 / 14.5
LAT= 24.0	U= 77.374 / 20.2	V= 84.063 / .5	W= 3.162043 / 9.8	T= 139.972 / 14.4
LAT= 30.0	U= 86.125 / 20.2	V= 97.982 / .7	W= 2.936256 / 9.7	T= 129.209 / 14.4
LAT= 36.0	U= 97.199 / 20.2	V= 113.182 / .9	W= 2.758771 / 9.5	T= 117.460 / 14.4
LAT= 42.0	U= 110.517 / 20.4	V= 131.895 / .9	W= 2.606095 / 9.1	T= 107.466 / 14.5
LAT= 48.0	U= 128.851 / 20.2	V= 151.643 / .9	W= 2.273676 / 8.4	T= 97.406 / 14.5
LAT= 54.0	U= 153.889 / 19.7	V= 172.482 / .8	W= 1.937692 / 6.9	T= 87.759 / 14.3
LAT= 60.0	U= 161.939 / 19.0	V= 190.001 / .8	W= 1.663918 / 4.2	T= 64.649 / 14.7
LAT= 66.0	U= 171.020 / 18.6	V= 206.072 / .8	W= 1.944650 / 2.3	T= 44.029 / 15.5
LAT= 72.0	U= 176.886 / 18.5	V= 220.927 / 1.0	W= 2.186726 / 1.4	T= 28.677 / 17.2
LAT= 78.0	U= 201.782 / 18.8	V= 239.752 / 1.2	W= 1.787859 / 1.3	T= 19.941 / 18.0

Z= 400.753 KM

LAT=-78.0	U= 146.269 / 19.3	V= 141.164 / 12.9	W= .412901 / 11.8	T= 27.788 / 16.4
LAT=-72.0	U= 154.222 / 19.5	V= 141.539 / 13.1	W= 1.122287 / 11.8	T= 44.450 / 16.7
LAT=-66.0	U= 162.642 / 19.8	V= 139.239 / 13.1	W= 2.031503 / 11.6	T= 69.365 / 16.5
LAT=-60.0	U= 159.386 / 19.9	V= 133.357 / 13.2	W= 2.707137 / 11.6	T= 86.316 / 16.2
LAT=-54.0	U= 144.079 / 19.9	V= 124.003 / 13.3	W= 3.147721 / 11.5	T= 95.832 / 15.9
LAT=-48.0	U= 118.705 / 19.9	V= 112.285 / 13.3	W= 3.315065 / 11.6	T= 97.739 / 16.0
LAT=-42.0	U= 103.092 / 19.9	V= 98.913 / 13.3	W= 3.602682 / 11.5	T= 111.374 / 15.7
LAT=-36.0	U= 97.302 / 20.0	V= 83.939 / 13.2	W= 4.032841 / 11.2	T= 137.602 / 15.3
LAT=-30.0	U= 78.667 / 20.0	V= 67.456 / 13.1	W= 4.019548 / 11.1	T= 136.926 / 15.3
LAT=-24.0	U= 68.323 / 20.0	V= 50.473 / 12.8	W= 4.130652 / 10.9	T= 143.061 / 15.2
LAT=-18.0	U= 66.383 / 20.2	V= 33.008 / 12.2	W= 4.396714 / 10.7	T= 155.429 / 15.1
LAT=-12.0	U= 63.749 / 20.5	V= 14.578 / 11.4	W= 4.427016 / 10.4	T= 150.028 / 15.0
LAT= -6.0	U= 63.733 / 20.7	V= 5.824 / 2.4	W= 4.452261 / 10.2	T= 145.887 / 15.0
LAT= 0.0	U= 65.637 / 20.8	V= 24.014 / .4	W= 4.419421 / 10.0	T= 145.535 / 14.8
LAT= 6.0	U= 67.467 / 20.7	V= 41.897 / .2	W= 4.327583 / 10.0	T= 148.160 / 14.8
LAT= 12.0	U= 70.348 / 20.4	V= 58.552 / .2	W= 4.157968 / 9.9	T= 151.955 / 14.6
LAT= 18.0	U= 74.705 / 20.3	V= 73.472 / .3	W= 3.953056 / 9.8	T= 154.684 / 14.5
LAT= 24.0	U= 81.265 / 20.2	V= 87.306 / .5	W= 3.640450 / 9.7	T= 145.094 / 14.4
LAT= 30.0	U= 90.319 / 20.2	V= 101.900 / .7	W= 3.378390 / 9.6	T= 133.869 / 14.4
LAT= 36.0	U= 101.782 / 20.3	V= 117.736 / .9	W= 3.168749 / 9.3	T= 121.631 / 14.4
LAT= 42.0	U= 115.541 / 20.4	V= 137.185 / .9	W= 2.994980 / 9.1	T= 111.383 / 14.5
LAT= 48.0	U= 134.423 / 20.2	V= 157.698 / .9	W= 2.613532 / 8.4	T= 101.011 / 14.5
LAT= 54.0	U= 160.214 / 19.7	V= 179.341 / .8	W= 2.240770 / 6.9	T= 91.058 / 14.3
LAT= 60.0	U= 168.254 / 19.0	V= 197.489 / .8	W= 1.876356 / 4.3	T= 67.108 / 14.7
LAT= 66.0	U= 177.437 / 18.6	V= 214.074 / .8	W= 2.130972 / 2.4	T= 45.722 / 15.5
LAT= 72.0	U= 183.334 / 18.5	V= 229.337 / 1.0	W= 2.375661 / 1.4	T= 29.787 / 17.2
LAT= 78.0	U= 209.123 / 18.8	V= 248.775 / 1.2	W= 1.932640 / 1.3	T= 20.717 / 18.0

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes

Z=	0.000	KM												
LAT=	0.0	U=	.155	/ 2.7	V=	0.000	/ 12.0	W=	0.000000	/ 12.0	T=	.049	/	9.6
LAT=	6.0	U=	.173	/ 2.8	V=	.045	/ 5.6	W=	0.000000	/ 12.0	T=	.047	/	9.7
LAT=	12.0	U=	.176	/ 2.8	V=	.091	/ 5.6	W=	0.000000	/ 12.0	T=	.040	/	9.7
LAT=	18.0	U=	.183	/ 2.8	V=	.137	/ 5.7	W=	0.000000	/ 12.0	T=	.031	/	9.7
LAT=	24.0	U=	.192	/ 2.8	V=	.179	/ 5.7	W=	0.000000	/ 12.0	T=	.021	/	9.7
LAT=	30.0	U=	.200	/ 2.8	V=	.210	/ 5.7	W=	0.000000	/ 12.0	T=	.013	/	9.7
LAT=	36.0	U=	.204	/ 2.8	V=	.223	/ 5.7	W=	0.000000	/ 12.0	T=	.007	/	9.9
LAT=	42.0	U=	.200	/ 2.8	V=	.219	/ 5.7	W=	0.000000	/ 12.0	T=	.003	/	10.2
LAT=	48.0	U=	.186	/ 2.8	V=	.201	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	11.2
LAT=	54.0	U=	.165	/ 2.8	V=	.174	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	.3
LAT=	60.0	U=	.139	/ 2.8	V=	.146	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	2.7
LAT=	66.0	U=	.117	/ 2.8	V=	.120	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	3.2
LAT=	72.0	U=	.092	/ 2.8	V=	.096	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	3.4
LAT=	78.0	U=	.066	/ 2.8	V=	.071	/ 5.7	W=	0.000000	/ 12.0	T=	.001	/	3.2
Z=	2.078	KM												
LAT=	0.0	U=	.182	/ 3.0	V=	0.000	/ 12.0	W=	.000025	/ 5.7	T=	.054	/	9.0
LAT=	6.0	U=	.185	/ 3.0	V=	.056	/ 5.8	W=	.000030	/ 6.0	T=	.052	/	9.0
LAT=	12.0	U=	.191	/ 3.0	V=	.108	/ 5.8	W=	.000041	/ 6.2	T=	.044	/	9.0
LAT=	18.0	U=	.200	/ 3.0	V=	.156	/ 5.9	W=	.000053	/ 6.3	T=	.033	/	9.0
LAT=	24.0	U=	.209	/ 3.0	V=	.196	/ 5.9	W=	.000056	/ 6.3	T=	.022	/	9.1
LAT=	30.0	U=	.219	/ 3.1	V=	.226	/ 6.0	W=	.000048	/ 6.2	T=	.013	/	9.2
LAT=	36.0	U=	.225	/ 3.1	V=	.245	/ 6.1	W=	.000032	/ 5.8	T=	.007	/	9.5
LAT=	42.0	U=	.227	/ 3.1	V=	.251	/ 6.1	W=	.000015	/ 5.2	T=	.003	/	10.3
LAT=	48.0	U=	.219	/ 3.1	V=	.241	/ 6.1	W=	.000006	/ 3.3	T=	.002	/	11.9
LAT=	54.0	U=	.204	/ 3.1	V=	.219	/ 6.1	W=	.000004	/ 2.0	T=	.001	/	.9
LAT=	60.0	U=	.177	/ 3.1	V=	.188	/ 6.1	W=	.000003	/ 5.3	T=	.002	/	2.1
LAT=	66.0	U=	.149	/ 3.1	V=	.152	/ 6.1	W=	.000013	/ 5.9	T=	.002	/	2.4
LAT=	72.0	U=	.115	/ 3.1	V=	.116	/ 6.1	W=	.000020	/ 5.6	T=	.002	/	2.6
LAT=	78.0	U=	.080	/ 3.2	V=	.081	/ 6.2	W=	.000023	/ 5.2	T=	.001	/	2.4
Z=	4.161	KM												
LAT=	0.0	U=	.187	/ 3.0	V=	0.000	/ 12.0	W=	.000079	/ 5.5	T=	.057	/	9.0
LAT=	6.0	U=	.190	/ 3.0	V=	.061	/ 5.9	W=	.000082	/ 5.7	T=	.054	/	9.0
LAT=	12.0	U=	.197	/ 3.0	V=	.117	/ 5.9	W=	.000088	/ 5.8	T=	.046	/	9.1
LAT=	18.0	U=	.206	/ 3.0	V=	.164	/ 5.9	W=	.000097	/ 6.1	T=	.035	/	9.1
LAT=	24.0	U=	.214	/ 3.0	V=	.201	/ 5.9	W=	.000099	/ 6.2	T=	.024	/	9.1
LAT=	30.0	U=	.222	/ 3.0	V=	.226	/ 6.0	W=	.000092	/ 6.2	T=	.015	/	9.2
LAT=	36.0	U=	.226	/ 3.1	V=	.242	/ 6.0	W=	.000074	/ 6.1	T=	.008	/	9.3
LAT=	42.0	U=	.226	/ 3.1	V=	.246	/ 6.1	W=	.000051	/ 5.9	T=	.004	/	9.6
LAT=	48.0	U=	.220	/ 3.1	V=	.240	/ 6.1	W=	.000030	/ 5.8	T=	.002	/	10.0
LAT=	54.0	U=	.208	/ 3.1	V=	.222	/ 6.1	W=	.000018	/ 6.0	T=	.001	/	10.5
LAT=	60.0	U=	.184	/ 3.1	V=	.195	/ 6.1	W=	.000016	/ 6.3	T=	.001	/	2.2
LAT=	66.0	U=	.157	/ 3.1	V=	.160	/ 6.1	W=	.000024	/ 6.3	T=	.001	/	2.7
LAT=	72.0	U=	.120	/ 3.1	V=	.120	/ 6.1	W=	.000030	/ 6.1	T=	.001	/	2.8
LAT=	78.0	U=	.081	/ 3.2	V=	.078	/ 6.2	W=	.000034	/ 5.6	T=	.001	/	2.6

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 9.525 KM														
LAT= 0.0	U=	.179	/ 3.0	V=	0.000	/ 12.0	W=	.000241	/ 5.5	T=	.050	/ 9.0		
LAT= 6.0	U=	.181	/ 3.0	V=	.064	/ 5.8	W=	.000227	/ 5.5	T=	.048	/ 9.0		
LAT= 12.0	U=	.187	/ 3.0	V=	.122	/ 5.8	W=	.000192	/ 5.7	T=	.041	/ 9.0		
LAT= 18.0	U=	.195	/ 3.0	V=	.169	/ 5.8	W=	.000159	/ 6.1	T=	.032	/ 9.0		
LAT= 24.0	U=	.202	/ 3.0	V=	.202	/ 5.9	W=	.000141	/ 6.5	T=	.022	/ 8.9		
LAT= 30.0	U=	.206	/ 3.0	V=	.219	/ 5.9	W=	.000138	/ 6.8	T=	.014	/ 8.8		
LAT= 36.0	U=	.204	/ 3.0	V=	.224	/ 5.9	W=	.000136	/ 6.9	T=	.008	/ 8.6		
LAT= 42.0	U=	.198	/ 3.0	V=	.217	/ 6.0	W=	.000127	/ 6.9	T=	.004	/ 8.2		
LAT= 48.0	U=	.185	/ 3.0	V=	.202	/ 6.0	W=	.000107	/ 6.9	T=	.002	/ 7.0		
LAT= 54.0	U=	.169	/ 3.1	V=	.180	/ 6.1	W=	.000086	/ 6.8	T=	.001	/ 6.1		
LAT= 60.0	U=	.144	/ 3.1	V=	.154	/ 6.1	W=	.000061	/ 6.8	T=	.001	/ 4.4		
LAT= 66.0	U=	.120	/ 3.1	V=	.123	/ 6.1	W=	.000051	/ 6.6	T=	.001	/ 4.2		
LAT= 72.0	U=	.089	/ 3.0	V=	.090	/ 6.0	W=	.000036	/ 6.4	T=	.001	/ 3.7		
LAT= 78.0	U=	.056	/ 3.1	V=	.056	/ 6.0	W=	.000041	/ 6.4	T=	.001	/ 3.3		
Z= 14.879 KM														
LAT= 0.0	U=	.190	/ 3.0	V=	0.000	/ 12.0	W=	.000434	/ 5.3	T=	.067	/ 9.1		
LAT= 6.0	U=	.193	/ 3.0	V=	.063	/ 5.7	W=	.000412	/ 5.4	T=	.066	/ 9.1		
LAT= 12.0	U=	.200	/ 3.0	V=	.124	/ 5.8	W=	.000357	/ 5.6	T=	.061	/ 9.0		
LAT= 18.0	U=	.210	/ 3.0	V=	.179	/ 5.8	W=	.000298	/ 6.1	T=	.055	/ 8.9		
LAT= 24.0	U=	.221	/ 3.0	V=	.223	/ 5.8	W=	.000260	/ 6.6	T=	.046	/ 8.8		
LAT= 30.0	U=	.230	/ 3.0	V=	.251	/ 5.9	W=	.000239	/ 7.0	T=	.036	/ 8.7		
LAT= 36.0	U=	.230	/ 3.0	V=	.258	/ 6.0	W=	.000218	/ 7.2	T=	.026	/ 8.6		
LAT= 42.0	U=	.222	/ 3.0	V=	.247	/ 6.0	W=	.000186	/ 7.3	T=	.017	/ 8.4		
LAT= 48.0	U=	.202	/ 3.0	V=	.223	/ 6.0	W=	.000144	/ 7.3	T=	.010	/ 8.2		
LAT= 54.0	U=	.177	/ 3.1	V=	.189	/ 6.1	W=	.000103	/ 7.2	T=	.006	/ 8.1		
LAT= 60.0	U=	.144	/ 3.1	V=	.154	/ 6.1	W=	.000060	/ 7.3	T=	.003	/ 7.7		
LAT= 66.0	U=	.115	/ 3.0	V=	.118	/ 6.0	W=	.000044	/ 6.8	T=	.001	/ 7.0		
LAT= 72.0	U=	.083	/ 3.0	V=	.084	/ 6.0	W=	.000017	/ 6.8	T=	0.000	/ 12.0		
LAT= 78.0	U=	.051	/ 3.0	V=	.052	/ 5.9	W=	.000030	/ 6.7	T=	.001	/ 3.8		
Z= 20.239 KM														
LAT= 0.0	U=	.219	/ 3.1	V=	0.000	/ 12.0	W=	.000796	/ 5.4	T=	.031	/ 10.6		
LAT= 6.0	U=	.222	/ 3.1	V=	.078	/ 6.4	W=	.000772	/ 5.5	T=	.028	/ 10.5		
LAT= 12.0	U=	.231	/ 3.1	V=	.150	/ 6.4	W=	.000706	/ 5.7	T=	.019	/ 10.2		
LAT= 18.0	U=	.242	/ 3.1	V=	.210	/ 6.3	W=	.000622	/ 6.0	T=	.010	/ 9.3		
LAT= 24.0	U=	.254	/ 3.1	V=	.255	/ 6.2	W=	.000536	/ 6.4	T=	.009	/ 7.1		
LAT= 30.0	U=	.263	/ 3.0	V=	.283	/ 6.1	W=	.000453	/ 6.7	T=	.014	/ 6.2		
LAT= 36.0	U=	.265	/ 2.9	V=	.293	/ 5.9	W=	.000370	/ 7.0	T=	.016	/ 5.8		
LAT= 42.0	U=	.259	/ 2.9	V=	.287	/ 5.8	W=	.000283	/ 7.2	T=	.015	/ 5.8		
LAT= 48.0	U=	.243	/ 2.8	V=	.267	/ 5.7	W=	.000198	/ 7.4	T=	.012	/ 5.8		
LAT= 54.0	U=	.221	/ 2.8	V=	.236	/ 5.7	W=	.000128	/ 7.5	T=	.008	/ 5.9		
LAT= 60.0	U=	.189	/ 2.7	V=	.200	/ 5.7	W=	.000063	/ 7.9	T=	.005	/ 6.3		
LAT= 66.0	U=	.155	/ 2.7	V=	.160	/ 5.6	W=	.000041	/ 7.2	T=	.002	/ 5.4		
LAT= 72.0	U=	.118	/ 2.8	V=	.119	/ 5.6	W=	.000008	/ 8.7	T=	.001	/ 8.0		
LAT= 78.0	U=	.076	/ 2.7	V=	.077	/ 5.6	W=	.000016	/ 8.1	T=	.001	/ 5.3		

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 25.607 KM														
LAT= 0.0	U=	.239	3.1	V=	0.000	12.0	W=	.001507	5.7	T=	.068	2.4		
LAT= 6.0	U=	.243	3.1	V=	.105	6.8	W=	.001453	5.8	T=	.067	2.5		
LAT= 12.0	U=	.252	3.1	V=	.192	6.7	W=	.001299	5.8	T=	.064	2.7		
LAT= 18.0	U=	.262	3.1	V=	.253	6.5	W=	.001087	5.9	T=	.060	3.0		
LAT= 24.0	U=	.267	3.0	V=	.284	6.3	W=	.000856	6.1	T=	.055	3.3		
LAT= 30.0	U=	.267	2.8	V=	.293	6.1	W=	.000641	6.2	T=	.049	3.6		
LAT= 36.0	U=	.261	2.6	V=	.289	5.7	W=	.000460	6.4	T=	.041	3.9		
LAT= 42.0	U=	.252	2.4	V=	.277	5.4	W=	.000318	6.6	T=	.032	4.1		
LAT= 48.0	U=	.238	2.2	V=	.259	5.1	W=	.000208	6.8	T=	.023	4.3		
LAT= 54.0	U=	.220	2.0	V=	.234	4.9	W=	.000135	6.9	T=	.015	4.3		
LAT= 60.0	U=	.193	1.9	V=	.202	4.8	W=	.000060	7.6	T=	.008	4.8		
LAT= 66.0	U=	.159	1.8	V=	.166	4.8	W=	.000057	6.7	T=	.006	4.1		
LAT= 72.0	U=	.127	1.9	V=	.125	4.7	W=	.000017	7.5	T=	.001	5.5		
LAT= 78.0	U=	.081	1.6	V=	.083	4.7	W=	.000017	10.5	T=	.002	6.5		
Z= 30.985 KM														
LAT= 0.0	U=	.186	3.2	V=	0.000	12.0	W=	.002809	6.1	T=	.259	3.0		
LAT= 6.0	U=	.189	3.2	V=	.089	6.9	W=	.002669	6.1	T=	.252	3.0		
LAT= 12.0	U=	.194	3.2	V=	.162	6.8	W=	.002286	6.0	T=	.232	3.0		
LAT= 18.0	U=	.198	3.2	V=	.207	6.7	W=	.001776	5.8	T=	.202	2.9		
LAT= 24.0	U=	.196	3.1	V=	.223	6.5	W=	.001263	5.6	T=	.167	2.8		
LAT= 30.0	U=	.188	2.8	V=	.215	6.2	W=	.000841	5.2	T=	.130	2.8		
LAT= 36.0	U=	.176	2.5	V=	.198	5.6	W=	.000544	4.8	T=	.095	2.7		
LAT= 42.0	U=	.166	2.1	V=	.182	5.1	W=	.000354	4.3	T=	.065	2.6		
LAT= 48.0	U=	.157	1.7	V=	.170	4.7	W=	.000225	4.0	T=	.041	2.6		
LAT= 54.0	U=	.149	1.4	V=	.158	4.3	W=	.000142	3.9	T=	.024	2.5		
LAT= 60.0	U=	.137	1.1	V=	.142	4.1	W=	.000065	2.8	T=	.009	2.4		
LAT= 66.0	U=	.113	.9	V=	.120	4.0	W=	.000062	4.8	T=	.010	2.6		
LAT= 72.0	U=	.093	1.0	V=	.092	3.9	W=	.000020	6.0	T=	.003	3.3		
LAT= 78.0	U=	.065	.8	V=	.060	3.9	W=	.000050	.7	T=	.004	9.5		
Z= 36.378 KM														
LAT= 0.0	U=	.017	4.1	V=	0.000	12.0	W=	.004721	6.3	T=	.615	3.2		
LAT= 6.0	U=	.016	4.2	V=	.004	10.1	W=	.004418	6.2	T=	.594	3.1		
LAT= 12.0	U=	.010	4.3	V=	.008	10.5	W=	.003602	6.1	T=	.535	3.1		
LAT= 18.0	U=	.005	5.7	V=	.014	10.8	W=	.002559	5.8	T=	.450	2.9		
LAT= 24.0	U=	.009	8.6	V=	.022	11.1	W=	.001617	5.2	T=	.357	2.7		
LAT= 30.0	U=	.017	9.1	V=	.027	11.4	W=	.001065	4.3	T=	.269	2.5		
LAT= 36.0	U=	.023	9.3	V=	.029	11.7	W=	.000906	3.4	T=	.193	2.2		
LAT= 42.0	U=	.024	9.5	V=	.028	.1	W=	.000826	2.8	T=	.132	2.0		
LAT= 48.0	U=	.024	9.9	V=	.024	.6	W=	.000674	2.5	T=	.085	1.7		
LAT= 54.0	U=	.021	10.3	V=	.021	1.2	W=	.000471	2.5	T=	.052	1.5		
LAT= 60.0	U=	.018	11.4	V=	.019	1.8	W=	.000299	2.1	T=	.024	.9		
LAT= 66.0	U=	.023	10.3	V=	.017	2.5	W=	.000147	3.3	T=	.018	1.6		
LAT= 72.0	U=	.015	11.9	V=	.014	3.0	W=	.000049	4.0	T=	.006	1.9		
LAT= 78.0	U=	.020	1.8	V=	.011	2.3	W=	.000117	1.3	T=	.010	10.1		

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 41.789 KM

LAT= 0.0	U=	.362	/ 9.2	V=	0.000	/ 12.0	W=	.006451	/ 6.3	T=	1.147	/ 3.1
LAT= 6.0	U=	.373	/ 9.2	V=	.179	/ .7	W=	.005917	/ 6.2	T=	1.111	/ 3.1
LAT= 12.0	U=	.401	/ 9.2	V=	.334	/ .7	W=	.004499	/ 6.1	T=	1.010	/ 3.1
LAT= 18.0	U=	.434	/ 9.2	V=	.450	/ .5	W=	.002732	/ 5.8	T=	.861	/ 2.9
LAT= 24.0	U=	.462	/ 9.1	V=	.519	/ .3	W=	.001299	/ 4.8	T=	.695	/ 2.8
LAT= 30.0	U=	.473	/ 9.0	V=	.543	/ .1	W=	.001074	/ 2.9	T=	.531	/ 2.6
LAT= 36.0	U=	.465	/ 8.8	V=	.531	/ 11.9	W=	.001370	/ 2.1	T=	.386	/ 2.4
LAT= 42.0	U=	.438	/ 8.6	V=	.493	/ 11.6	W=	.001359	/ 1.9	T=	.265	/ 2.2
LAT= 48.0	U=	.399	/ 8.4	V=	.438	/ 11.4	W=	.001094	/ 1.9	T=	.171	/ 2.1
LAT= 54.0	U=	.349	/ 8.1	V=	.375	/ 11.1	W=	.000733	/ 2.1	T=	.103	/ 1.9
LAT= 60.0	U=	.283	/ 7.9	V=	.309	/ 11.0	W=	.000452	/ 2.1	T=	.048	/ 1.6
LAT= 66.0	U=	.251	/ 7.9	V=	.240	/ 10.8	W=	.000225	/ 3.4	T=	.034	/ 2.0
LAT= 72.0	U=	.167	/ 7.7	V=	.172	/ 10.7	W=	.000100	/ 4.0	T=	.011	/ 2.0
LAT= 78.0	U=	.104	/ 7.2	V=	.117	/ 10.7	W=	.000102	/ 2.2	T=	.009	/ 10.8

Z= 47.224 KM

LAT= 0.0	U=	.910	/ 9.0	V=	0.000	/ 12.0	W=	.007344	/ 6.1	T=	1.464	/ 3.0
LAT= 6.0	U=	.937	/ 9.0	V=	.414	/ .7	W=	.006478	/ 6.1	T=	1.420	/ 3.0
LAT= 12.0	U=	1.002	/ 9.0	V=	.763	/ .6	W=	.004195	/ 6.1	T=	1.296	/ 3.0
LAT= 18.0	U=	1.072	/ 9.0	V=	1.008	/ .4	W=	.001384	/ 5.8	T=	1.110	/ 2.9
LAT= 24.0	U=	1.129	/ 8.9	V=	1.149	/ .2	W=	.001156	/ .7	T=	.898	/ 2.8
LAT= 30.0	U=	1.155	/ 8.8	V=	1.213	/ 12.0	W=	.002662	/ .4	T=	.687	/ 2.7
LAT= 36.0	U=	1.158	/ 8.6	V=	1.234	/ 11.7	W=	.003094	/ .4	T=	.496	/ 2.6
LAT= 42.0	U=	1.142	/ 8.4	V=	1.231	/ 11.4	W=	.002704	/ .5	T=	.338	/ 2.5
LAT= 48.0	U=	1.111	/ 8.2	V=	1.197	/ 11.2	W=	.001936	/ .6	T=	.214	/ 2.4
LAT= 54.0	U=	1.052	/ 8.1	V=	1.121	/ 11.1	W=	.001112	/ .8	T=	.128	/ 2.3
LAT= 60.0	U=	.935	/ 8.0	V=	1.001	/ 11.0	W=	.000603	/ .9	T=	.056	/ 2.1
LAT= 66.0	U=	.839	/ 8.0	V=	.834	/ 10.9	W=	.000169	/ 2.5	T=	.041	/ 2.4
LAT= 72.0	U=	.635	/ 7.9	V=	.637	/ 10.9	W=	.000091	/ 3.1	T=	.012	/ 2.3
LAT= 78.0	U=	.413	/ 7.7	V=	.439	/ 10.9	W=	.000079	/ 4.9	T=	.004	/ 11.8

Z= 52.691 KM

LAT= 0.0	U=	1.442	/ 9.1	V=	0.000	/ 12.0	W=	.007866	/ 5.8	T=	1.355	/ 3.0
LAT= 6.0	U=	1.484	/ 9.1	V=	.730	/ .4	W=	.006634	/ 5.8	T=	1.292	/ 3.0
LAT= 12.0	U=	1.580	/ 9.1	V=	1.319	/ .4	W=	.003389	/ 5.8	T=	1.118	/ 3.0
LAT= 18.0	U=	1.665	/ 9.1	V=	1.684	/ .3	W=	.000617	/ 11.7	T=	.874	/ 3.0
LAT= 24.0	U=	1.697	/ 9.0	V=	1.820	/ .2	W=	.004100	/ 11.8	T=	.616	/ 2.9
LAT= 30.0	U=	1.655	/ 8.9	V=	1.788	/ .1	W=	.006142	/ 11.8	T=	.389	/ 2.9
LAT= 36.0	U=	1.562	/ 8.7	V=	1.678	/ 11.8	W=	.006531	/ 11.8	T=	.216	/ 2.8
LAT= 42.0	U=	1.454	/ 8.6	V=	1.559	/ 11.6	W=	.005631	/ 11.8	T=	.104	/ 2.8
LAT= 48.0	U=	1.354	/ 8.4	V=	1.451	/ 11.4	W=	.004131	/ 11.8	T=	.041	/ 2.6
LAT= 54.0	U=	1.261	/ 8.2	V=	1.339	/ 11.2	W=	.002532	/ 11.8	T=	.015	/ 2.3
LAT= 60.0	U=	1.118	/ 8.1	V=	1.203	/ 11.1	W=	.001422	/ 11.8	T=	.011	/ 9.1
LAT= 66.0	U=	1.025	/ 8.1	V=	1.019	/ 11.1	W=	.000498	/ 11.7	T=	.010	/ 2.8
LAT= 72.0	U=	.789	/ 8.1	V=	.793	/ 11.1	W=	.000259	/ .3	T=	.005	/ 9.8
LAT= 78.0	U=	.519	/ 8.0	V=	.561	/ 11.1	W=	.000118	/ 8.2	T=	.005	/ 7.6

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 58.200 KM

LAT= 0.0	U=	1.871 /	9.0	V=	0.000 /	12.0	W=	.008564 /	5.3	T=	1.328 /	2.8
LAT= 6.0	U=	1.920 /	9.0	V=	1.049 /	.2	W=	.007014 /	5.3	T=	1.243 /	2.8
LAT= 12.0	U=	2.022 /	9.0	V=	1.873 /	.2	W=	.002907 /	5.2	T=	1.013 /	2.9
LAT= 18.0	U=	2.089 /	9.0	V=	2.332 /	.1	W=	.002285 /	11.6	T=	.698 /	2.9
LAT= 24.0	U=	2.057 /	8.9	V=	2.413 /	.1	W=	.006927 /	11.5	T=	.379 /	3.1
LAT= 30.0	U=	1.895 /	8.9	V=	2.208 /	12.0	W=	.009812 /	11.5	T=	.130 /	3.9
LAT= 36.0	U=	1.640 /	8.7	V=	1.858 /	11.8	W=	.010529 /	11.4	T=	.095 /	7.2
LAT= 42.0	U=	1.357 /	8.6	V=	1.495 /	11.6	W=	.009416 /	11.4	T=	.155 /	8.0
LAT= 48.0	U=	1.104 /	8.4	V=	1.193 /	11.4	W=	.007272 /	11.4	T=	.159 /	8.2
LAT= 54.0	U=	.912 /	8.2	V=	.966 /	11.2	W=	.004830 /	11.4	T=	.121 /	8.3
LAT= 60.0	U=	.723 /	8.0	V=	.797 /	11.1	W=	.002913 /	11.4	T=	.093 /	8.4
LAT= 66.0	U=	.661 /	8.0	V=	.639 /	11.0	W=	.001367 /	11.3	T=	.032 /	8.1
LAT= 72.0	U=	.456 /	7.9	V=	.481 /	11.0	W=	.000789 /	11.8	T=	.032 /	8.9
LAT= 78.0	U=	.323 /	7.9	V=	.345 /	11.0	W=	.000327 /	9.3	T=	.014 /	6.5

Z= 63.765 KM

LAT= 0.0	U=	2.274 /	9.0	V=	0.000 /	12.0	W=	.009984 /	4.9	T=	1.476 /	2.7
LAT= 6.0	U=	2.320 /	9.0	V=	1.323 /	.1	W=	.008027 /	4.8	T=	1.362 /	2.7
LAT= 12.0	U=	2.410 /	9.0	V=	2.380 /	12.0	W=	.002877 /	4.5	T=	1.055 /	2.8
LAT= 18.0	U=	2.449 /	9.0	V=	2.984 /	12.0	W=	.003874 /	11.4	T=	.645 /	3.0
LAT= 24.0	U=	2.354 /	8.9	V=	3.072 /	12.0	W=	.009761 /	11.2	T=	.264 /	3.8
LAT= 30.0	U=	2.067 /	8.9	V=	2.708 /	11.9	W=	.013421 /	11.2	T=	.203 /	6.8
LAT= 36.0	U=	1.605 /	8.8	V=	2.048 /	11.9	W=	.014271 /	11.2	T=	.347 /	7.7
LAT= 42.0	U=	1.042 /	8.7	V=	1.283 /	11.8	W=	.012720 /	11.1	T=	.392 /	8.0
LAT= 48.0	U=	.489 /	8.5	V=	.584 /	11.6	W=	.009800 /	11.1	T=	.346 /	8.1
LAT= 54.0	U=	.086 /	6.6	V=	.087 /	9.9	W=	.006495 /	11.1	T=	.249 /	8.1
LAT= 60.0	U=	.316 /	3.2	V=	.273 /	6.2	W=	.003859 /	11.2	T=	.172 /	8.2
LAT= 66.0	U=	.348 /	3.0	V=	.408 /	5.9	W=	.001822 /	11.1	T=	.069 /	8.1
LAT= 72.0	U=	.453 /	3.0	V=	.407 /	5.8	W=	.001098 /	11.8	T=	.057 /	8.9
LAT= 78.0	U=	.320 /	2.6	V=	.282 /	5.8	W=	.000497 /	8.8	T=	.025 /	6.2

Z= 69.403 KM

LAT= 0.0	U=	2.816 /	8.9	V=	0.000 /	12.0	W=	.012134 /	4.4	T=	1.799 /	2.5
LAT= 6.0	U=	2.865 /	8.9	V=	1.860 /	11.7	W=	.009556 /	4.3	T=	1.632 /	2.5
LAT= 12.0	U=	2.946 /	8.9	V=	3.306 /	11.7	W=	.003119 /	3.6	T=	1.187 /	2.7
LAT= 18.0	U=	2.927 /	8.9	V=	4.043 /	11.7	W=	.005968 /	11.3	T=	.635 /	3.2
LAT= 24.0	U=	2.685 /	8.9	V=	3.976 /	11.8	W=	.012776 /	10.9	T=	.323 /	5.2
LAT= 30.0	U=	2.150 /	9.0	V=	3.216 /	11.9	W=	.016377 /	10.8	T=	.516 /	7.0
LAT= 36.0	U=	1.385 /	9.3	V=	2.048 /	.1	W=	.016328 /	10.8	T=	.659 /	7.4
LAT= 42.0	U=	.665 /	10.6	V=	.903 /	1.0	W=	.013555 /	10.7	T=	.638 /	7.5
LAT= 48.0	U=	.806 /	1.0	V=	.790 /	3.8	W=	.009607 /	10.7	T=	.510 /	7.6
LAT= 54.0	U=	1.316 /	1.7	V=	1.373 /	4.6	W=	.005722 /	10.6	T=	.338 /	7.6
LAT= 60.0	U=	1.663 /	1.9	V=	1.663 /	4.8	W=	.002945 /	10.5	T=	.213 /	7.7
LAT= 66.0	U=	1.550 /	1.9	V=	1.642 /	4.9	W=	.001084 /	10.1	T=	.080 /	7.3
LAT= 72.0	U=	1.404 /	2.1	V=	1.384 /	4.9	W=	.000551 /	.1	T=	.053 /	8.8
LAT= 78.0	U=	1.046 /	1.9	V=	.932 /	4.9	W=	.000757 /	7.5	T=	.041 /	5.4

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 75.140 KM

LAT= 0.0	U=	3.764 /	8.6	V=	0.000 /	12.0	W=	.012091 /	3.6	T=	2.213 /	2.1
LAT= 6.0	U=	3.844 /	8.6	V=	3.273 /	11.2	W=	.009637 /	3.4	T=	1.979 /	2.2
LAT= 12.0	U=	3.939 /	8.6	V=	5.571 /	11.3	W=	.004228 /	2.2	T=	1.376 /	2.5
LAT= 18.0	U=	3.776 /	8.7	V=	6.313 /	11.3	W=	.006643 /	11.1	T=	.721 /	3.4
LAT= 24.0	U=	3.163 /	8.9	V=	5.496 /	11.5	W=	.012384 /	10.4	T=	.651 /	5.4
LAT= 30.0	U=	2.194 /	9.5	V=	3.670 /	11.9	W=	.015087 /	10.2	T=	.962 /	6.4
LAT= 36.0	U=	1.638 /	11.0	V=	1.957 /	1.1	W=	.014408 /	9.9	T=	1.085 /	6.6
LAT= 42.0	U=	2.306 /	.4	V=	2.232 /	3.2	W=	.011476 /	9.7	T=	.984 /	6.7
LAT= 48.0	U=	3.229 /	.9	V=	3.332 /	3.9	W=	.007843 /	9.4	T=	.756 /	6.7
LAT= 54.0	U=	3.737 /	1.1	V=	3.922 /	4.1	W=	.004645 /	8.9	T=	.493 /	6.5
LAT= 60.0	U=	3.807 /	1.2	V=	3.882 /	4.2	W=	.002401 /	8.4	T=	.293 /	6.6
LAT= 66.0	U=	3.272 /	1.2	V=	3.401 /	4.2	W=	.001374 /	7.3	T=	.136 /	5.8
LAT= 72.0	U=	2.655 /	1.3	V=	2.653 /	4.2	W=	.000405 /	5.6	T=	.044 /	7.3
LAT= 78.0	U=	1.871 /	1.1	V=	1.732 /	4.2	W=	.000877 /	6.9	T=	.064 /	4.9

Z= 81.010 KM

LAT= 0.0	U=	5.142 /	8.4	V=	0.000 /	12.0	W=	.017816 /	.9	T=	1.880 /	1.5
LAT= 6.0	U=	5.284 /	8.4	V=	5.267 /	10.9	W=	.015337 /	.9	T=	1.730 /	1.7
LAT= 12.0	U=	5.452 /	8.4	V=	8.828 /	11.0	W=	.008815 /	.6	T=	1.402 /	2.2
LAT= 18.0	U=	5.172 /	8.5	V=	9.692 /	11.0	W=	.002570 /	9.8	T=	1.239 /	3.3
LAT= 24.0	U=	4.159 /	8.9	V=	7.934 /	11.2	W=	.009018 /	7.6	T=	1.413 /	4.2
LAT= 30.0	U=	2.907 /	9.9	V=	4.689 /	11.7	W=	.014541 /	7.3	T=	1.629 /	4.6
LAT= 36.0	U=	1.346 /	11.6	V=	2.979 /	1.8	W=	.016570 /	7.1	T=	1.655 /	4.8
LAT= 42.0	U=	5.290 /	.3	V=	5.187 /	3.2	W=	.015343 /	6.9	T=	1.462 /	4.9
LAT= 48.0	U=	7.017 /	.6	V=	7.334 /	3.6	W=	.011989 /	6.8	T=	1.129 /	5.0
LAT= 54.0	U=	7.854 /	.6	V=	8.278 /	3.6	W=	.008188 /	6.6	T=	.770 /	5.1
LAT= 60.0	U=	7.816 /	.7	V=	8.054 /	3.6	W=	.004479 /	6.3	T=	.441 /	5.4
LAT= 66.0	U=	6.806 /	.6	V=	7.003 /	3.6	W=	.002482 /	5.8	T=	.252 /	5.0
LAT= 72.0	U=	5.460 /	.6	V=	5.453 /	3.6	W=	.001338 /	5.8	T=	.116 /	5.7
LAT= 78.0	U=	3.787 /	.4	V=	3.622 /	3.5	W=	.000582 /	2.6	T=	.032 /	6.4

Z= 87.062 KM

LAT= 0.0	U=	5.737 /	8.4	V=	0.000 /	12.0	W=	.057345 /	11.6	T=	1.946 /	8.9
LAT= 6.0	U=	5.906 /	8.4	V=	4.755 /	10.5	W=	.047436 /	11.6	T=	1.235 /	8.9
LAT= 12.0	U=	6.218 /	8.4	V=	8.150 /	10.6	W=	.021761 /	11.5	T=	.599 /	3.2
LAT= 18.0	U=	6.325 /	8.5	V=	9.387 /	10.7	W=	.010405 /	6.1	T=	2.774 /	3.0
LAT= 24.0	U=	6.041 /	8.8	V=	8.567 /	11.0	W=	.037049 /	5.6	T=	4.484 /	2.9
LAT= 30.0	U=	5.678 /	9.4	V=	6.830 /	11.7	W=	.052022 /	5.5	T=	5.223 /	2.9
LAT= 36.0	U=	6.013 /	10.2	V=	6.215 /	.8	W=	.053927 /	5.3	T=	4.951 /	2.8
LAT= 42.0	U=	7.203 /	10.9	V=	7.481 /	1.8	W=	.046230 /	5.1	T=	3.985 /	2.7
LAT= 48.0	U=	8.503 /	11.3	V=	9.026 /	2.2	W=	.034132 /	4.9	T=	2.759 /	2.6
LAT= 54.0	U=	9.209 /	11.4	V=	9.734 /	2.4	W=	.022453 /	4.6	T=	1.687 /	2.3
LAT= 60.0	U=	8.994 /	11.6	V=	9.382 /	2.5	W=	.013050 /	4.2	T=	.795 /	1.9
LAT= 66.0	U=	8.049 /	11.5	V=	8.133 /	2.6	W=	.007074 /	3.7	T=	.407 /	1.7
LAT= 72.0	U=	6.241 /	11.7	V=	6.325 /	2.6	W=	.002891 /	4.2	T=	.137 /	2.4
LAT= 78.0	U=	4.517 /	11.5	V=	4.241 /	2.6	W=	.005058 /	1.9	T=	.327 /	10.7

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 93.363 KM

LAT= 0.0	U=	2.863	/ 8.9	V=	0.000	/ 12.0	W=	.093072	/ 10.5	T=	5.864	/ 7.2
LAT= 6.0	U=	2.634	/ 8.9	V=	8.458	/ 5.8	W=	.078928	/ 10.5	T=	4.673	/ 7.1
LAT= 12.0	U=	2.634	/ 9.0	V=	12.403	/ 5.9	W=	.041247	/ 10.6	T=	1.944	/ 5.8
LAT= 18.0	U=	4.303	/ 9.0	V=	9.527	/ 5.8	W=	.008634	/ 3.8	T=	3.480	/ 2.6
LAT= 24.0	U=	8.586	/ 8.9	V=	.662	/ 5.7	W=	.054585	/ 4.3	T=	7.013	/ 2.1
LAT= 30.0	U=	14.972	/ 8.9	V=	10.963	/ 11.9	W=	.086887	/ 4.3	T=	9.298	/ 1.9
LAT= 36.0	U=	21.664	/ 8.9	V=	21.488	/ 11.9	W=	.100138	/ 4.3	T=	9.874	/ 1.8
LAT= 42.0	U=	26.542	/ 8.9	V=	28.134	/ 11.9	W=	.095717	/ 4.3	T=	8.966	/ 1.7
LAT= 48.0	U=	28.216	/ 8.9	V=	29.995	/ 11.9	W=	.079146	/ 4.3	T=	7.130	/ 1.6
LAT= 54.0	U=	26.755	/ 8.9	V=	27.784	/ 11.9	W=	.057690	/ 4.3	T=	5.069	/ 1.6
LAT= 60.0	U=	22.313	/ 8.8	V=	23.160	/ 11.8	W=	.036767	/ 4.3	T=	3.070	/ 1.5
LAT= 66.0	U=	17.854	/ 8.8	V=	17.541	/ 11.8	W=	.020258	/ 4.3	T=	1.726	/ 1.6
LAT= 72.0	U=	12.314	/ 8.7	V=	12.008	/ 11.7	W=	.011344	/ 4.9	T=	.952	/ 2.1
LAT= 78.0	U=	6.542	/ 8.5	V=	7.392	/ 11.6	W=	.006662	/ 3.0	T=	.525	/ 11.7

Z= 96.638 KM

LAT= 0.0	U=	3.013	/ 10.5	V=	0.000	/ 12.0	W=	.093427	/ 9.9	T=	7.276	/ 6.5
LAT= 6.0	U=	2.921	/ 10.6	V=	10.829	/ 5.3	W=	.080747	/ 9.9	T=	6.029	/ 6.4
LAT= 12.0	U=	3.022	/ 10.6	V=	16.780	/ 5.2	W=	.046932	/ 10.3	T=	3.010	/ 5.5
LAT= 18.0	U=	4.349	/ 9.9	V=	15.138	/ 5.1	W=	.017054	/ 1.1	T=	3.005	/ 2.4
LAT= 24.0	U=	8.668	/ 9.2	V=	6.830	/ 4.3	W=	.054564	/ 3.1	T=	6.516	/ 1.6
LAT= 30.0	U=	15.933	/ 8.9	V=	8.855	/ .5	W=	.091041	/ 3.5	T=	8.920	/ 1.4
LAT= 36.0	U=	24.336	/ 8.8	V=	21.886	/ 11.9	W=	.111028	/ 3.7	T=	9.518	/ 1.3
LAT= 42.0	U=	31.532	/ 8.7	V=	32.149	/ 11.7	W=	.112734	/ 3.9	T=	8.526	/ 1.3
LAT= 48.0	U=	35.652	/ 8.6	V=	37.470	/ 11.6	W=	.099432	/ 4.1	T=	6.564	/ 1.3
LAT= 54.0	U=	36.174	/ 8.5	V=	37.739	/ 11.5	W=	.077593	/ 4.3	T=	4.420	/ 1.3
LAT= 60.0	U=	32.792	/ 8.4	V=	34.181	/ 11.4	W=	.053574	/ 4.4	T=	2.476	/ 1.4
LAT= 66.0	U=	28.045	/ 8.3	V=	28.145	/ 11.3	W=	.032107	/ 4.6	T=	1.247	/ 1.7
LAT= 72.0	U=	21.147	/ 8.3	V=	20.966	/ 11.2	W=	.021223	/ 5.2	T=	.768	/ 2.7
LAT= 78.0	U=	13.430	/ 8.0	V=	13.810	/ 11.2	W=	.009733	/ 4.3	T=	.418	/ .1

Z= 100.017 KM

LAT= 0.0	U=	4.524	/ 8.5	V=	0.000	/ 12.0	W=	.106053	/ 8.7	T=	8.921	/ 4.7
LAT= 6.0	U=	4.402	/ 8.5	V=	10.908	/ 5.1	W=	.089107	/ 8.8	T=	7.551	/ 4.6
LAT= 12.0	U=	4.723	/ 8.5	V=	17.380	/ 5.1	W=	.046898	/ 9.6	T=	5.052	/ 3.7
LAT= 18.0	U=	6.788	/ 8.5	V=	16.192	/ 5.0	W=	.037388	/ .8	T=	5.587	/ 1.8
LAT= 24.0	U=	12.107	/ 8.4	V=	6.805	/ 4.8	W=	.086683	/ 2.0	T=	9.119	/ .9
LAT= 30.0	U=	20.772	/ 8.4	V=	8.937	/ 11.3	W=	.125359	/ 2.4	T=	11.999	/ .7
LAT= 36.0	U=	32.214	/ 8.3	V=	27.129	/ 11.2	W=	.142224	/ 2.7	T=	12.919	/ .8
LAT= 42.0	U=	43.721	/ 8.2	V=	43.830	/ 11.2	W=	.138257	/ 3.1	T=	11.821	/ .7
LAT= 48.0	U=	52.816	/ 8.3	V=	56.054	/ 11.2	W=	.119759	/ 3.5	T=	9.416	/ .9
LAT= 54.0	U=	57.908	/ 8.2	V=	61.570	/ 11.2	W=	.094051	/ 3.9	T=	6.508	/ 1.1
LAT= 60.0	U=	57.460	/ 8.2	V=	60.334	/ 11.2	W=	.066959	/ 4.3	T=	3.995	/ 1.3
LAT= 66.0	U=	52.658	/ 8.2	V=	53.451	/ 11.2	W=	.041652	/ 4.5	T=	2.131	/ 1.6
LAT= 72.0	U=	42.449	/ 8.2	V=	42.562	/ 11.2	W=	.028209	/ 5.1	T=	1.224	/ 2.4
LAT= 78.0	U=	28.669	/ 8.2	V=	29.914	/ 11.2	W=	.013406	/ 4.8	T=	.357	/ 1.1

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 103.521 KM

LAT= 0.0	U=	11.365	/ 10.2	V=	.001	/ 11.6	W=	.123250	/ 7.7	T=	17.707	/ 4.3
LAT= 6.0	U=	11.700	/ 10.2	V=	19.742	/ 3.4	W=	.100019	/ 7.8	T=	15.064	/ 4.2
LAT= 12.0	U=	12.428	/ 10.2	V=	32.639	/ 3.4	W=	.044519	/ 8.9	T=	8.967	/ 3.7
LAT= 18.0	U=	13.405	/ 9.7	V=	33.914	/ 3.3	W=	.062617	/ .3	T=	5.175	/ 1.4
LAT= 24.0	U=	16.048	/ 8.9	V=	22.787	/ 3.1	W=	.132083	/ 1.0	T=	10.775	/ 11.8
LAT= 30.0	U=	24.851	/ 8.0	V=	7.608	/ .6	W=	.177284	/ 1.3	T=	15.813	/ 11.7
LAT= 36.0	U=	39.714	/ 7.6	V=	29.498	/ 10.4	W=	.187869	/ 1.6	T=	17.319	/ 11.7
LAT= 42.0	U=	56.996	/ 7.4	V=	56.035	/ 10.2	W=	.169303	/ 1.9	T=	15.800	/ 11.8
LAT= 48.0	U=	72.417	/ 7.3	V=	76.941	/ 10.2	W=	.134938	/ 2.4	T=	12.401	/ 12.0
LAT= 54.0	U=	82.382	/ 7.3	V=	88.528	/ 10.2	W=	.098894	/ 2.9	T=	8.705	/ .5
LAT= 60.0	U=	84.603	/ 7.3	V=	89.623	/ 10.3	W=	.067279	/ 3.4	T=	5.606	/ 1.0
LAT= 66.0	U=	78.895	/ 7.4	V=	81.268	/ 10.4	W=	.041426	/ 3.9	T=	3.425	/ 1.6
LAT= 72.0	U=	64.357	/ 7.5	V=	65.461	/ 10.5	W=	.028957	/ 4.6	T=	2.724	/ 2.4
LAT= 78.0	U=	46.383	/ 7.5	V=	45.465	/ 10.5	W=	.012829	/ 3.9	T=	1.172	/ 1.6

Z= 107.177 KM

LAT= 0.0	U=	20.861	/ 10.1	V=	0.000	/ 9.5	W=	.114417	/ 5.9	T=	22.328	/ 3.3
LAT= 6.0	U=	21.644	/ 10.0	V=	29.425	/ 2.2	W=	.087166	/ 5.9	T=	18.988	/ 3.2
LAT= 12.0	U=	22.446	/ 9.9	V=	49.383	/ 2.3	W=	.014633	/ 6.2	T=	10.172	/ 3.1
LAT= 18.0	U=	21.644	/ 9.7	V=	54.102	/ 2.2	W=	.078871	/ 11.9	T=	2.809	/ 11.3
LAT= 24.0	U=	19.770	/ 8.9	V=	41.493	/ 2.2	W=	.162706	/ 12.0	T=	12.921	/ 10.0
LAT= 30.0	U=	22.573	/ 7.6	V=	14.927	/ 2.0	W=	.214033	/ .2	T=	20.212	/ 10.0
LAT= 36.0	U=	36.604	/ 6.6	V=	20.199	/ 9.1	W=	.222494	/ .3	T=	22.698	/ 10.1
LAT= 42.0	U=	56.608	/ 6.3	V=	53.180	/ 8.9	W=	.194809	/ .5	T=	21.075	/ 10.3
LAT= 48.0	U=	75.233	/ 6.2	V=	79.772	/ 9.0	W=	.146950	/ .9	T=	16.823	/ 10.6
LAT= 54.0	U=	88.444	/ 6.2	V=	95.682	/ 9.0	W=	.098873	/ 1.4	T=	12.035	/ 11.1
LAT= 60.0	U=	93.275	/ 6.2	V=	99.593	/ 9.2	W=	.061711	/ 2.1	T=	8.143	/ 11.7
LAT= 66.0	U=	88.331	/ 6.4	V=	92.398	/ 9.4	W=	.037777	/ 2.6	T=	5.152	/ .3
LAT= 72.0	U=	74.015	/ 6.5	V=	75.962	/ 9.4	W=	.028944	/ 3.5	T=	4.159	/ 1.1
LAT= 78.0	U=	55.146	/ 6.4	V=	53.185	/ 9.5	W=	.008069	/ 2.1	T=	1.129	/ 11.8

Z= 111.019 KM

LAT= 0.0	U=	30.112	/ 9.3	V=	.002	/ 3.3	W=	.164262	/ 3.8	T=	28.795	/ 1.5
LAT= 6.0	U=	30.756	/ 9.3	V=	31.339	/ 1.0	W=	.135620	/ 3.6	T=	24.946	/ 1.5
LAT= 12.0	U=	30.974	/ 9.2	V=	53.979	/ 1.0	W=	.068397	/ 2.7	T=	14.352	/ 1.3
LAT= 18.0	U=	29.541	/ 8.9	V=	61.536	/ 1.1	W=	.082556	/ 11.8	T=	3.817	/ 10.5
LAT= 24.0	U=	26.167	/ 8.4	V=	52.492	/ 1.2	W=	.167832	/ 11.1	T=	14.964	/ 8.4
LAT= 30.0	U=	22.432	/ 7.4	V=	29.632	/ 1.2	W=	.228059	/ 11.0	T=	24.665	/ 8.4
LAT= 36.0	U=	27.416	/ 6.1	V=	1.677	/ 8.1	W=	.243308	/ 11.1	T=	28.710	/ 8.6
LAT= 42.0	U=	42.174	/ 5.4	V=	33.205	/ 7.6	W=	.217770	/ 11.3	T=	27.550	/ 8.7
LAT= 48.0	U=	58.200	/ 5.1	V=	59.229	/ 7.7	W=	.166564	/ 11.5	T=	22.918	/ 9.1
LAT= 54.0	U=	70.564	/ 5.1	V=	76.427	/ 7.9	W=	.110806	/ 11.8	T=	17.167	/ 9.5
LAT= 60.0	U=	77.317	/ 5.1	V=	82.596	/ 8.0	W=	.065541	/ .3	T=	12.201	/ 10.1
LAT= 66.0	U=	74.680	/ 5.3	V=	78.909	/ 8.2	W=	.038467	/ .9	T=	8.249	/ 10.6
LAT= 72.0	U=	65.237	/ 5.4	V=	66.559	/ 8.4	W=	.029796	/ 1.8	T=	6.449	/ 11.1
LAT= 78.0	U=	48.823	/ 5.3	V=	47.546	/ 8.5	W=	.008989	/ 11.3	T=	1.614	/ 9.4

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes from 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 115.091 KM

LAT= 0.0	U= 36.253 / 8.4	V= .006 / 2.1	W= .259210 / 2.4	T= 42.851 / 11.9
LAT= 6.0	U= 36.532 / 8.3	V= 29.735 / 11.8	W= .226542 / 2.3	T= 37.952 / 11.8
LAT= 12.0	U= 35.997 / 8.2	V= 52.005 / 11.9	W= .150115 / 1.8	T= 25.108 / 11.7
LAT= 18.0	U= 34.082 / 8.0	V= 61.629 / 11.9	W= .096997 / .1	T= 9.740 / 10.7
LAT= 24.0	U= 30.139 / 7.7	V= 56.451 / .1	W= .153680 / 10.6	T= 13.357 / 7.6
LAT= 30.0	U= 24.524 / 7.1	V= 39.322 / .2	W= .221386 / 10.2	T= 25.087 / 7.2
LAT= 36.0	U= 21.874 / 5.9	V= 15.403 / .4	W= .250653 / 10.1	T= 31.341 / 7.1
LAT= 42.0	U= 28.452 / 4.8	V= 11.993 / 6.1	W= .237799 / 10.2	T= 31.805 / 7.4
LAT= 48.0	U= 40.124 / 4.4	V= 35.153 / 6.5	W= .193129 / 10.3	T= 27.768 / 7.6
LAT= 54.0	U= 49.857 / 4.2	V= 51.214 / 6.7	W= .137490 / 10.6	T= 21.746 / 8.0
LAT= 60.0	U= 57.163 / 4.2	V= 59.476 / 7.1	W= .088444 / 10.9	T= 15.939 / 8.4
LAT= 66.0	U= 55.999 / 4.3	V= 58.994 / 7.2	W= .053038 / 11.4	T= 10.870 / 8.8
LAT= 72.0	U= 51.156 / 4.5	V= 51.859 / 7.5	W= .037981 / .2	T= 8.245 / 9.3
LAT= 78.0	U= 38.330 / 4.3	V= 38.183 / 7.7	W= .013980 / 9.7	T= 2.173 / 7.9

Z= 119.451 KM

LAT= 0.0	U= 39.181 / 7.6	V= .007 / 1.8	W= .359669 / 1.6	T= 56.159 / 10.8
LAT= 6.0	U= 38.900 / 7.5	V= 27.032 / 10.8	W= .326094 / 1.5	T= 51.109 / 10.8
LAT= 12.0	U= 37.752 / 7.4	V= 48.172 / 10.8	W= .235492 / 1.2	T= 37.001 / 10.8
LAT= 18.0	U= 35.669 / 7.1	V= 58.319 / 10.9	W= .133861 / .3	T= 18.241 / 10.4
LAT= 24.0	U= 32.180 / 6.8	V= 56.762 / 11.0	W= .128699 / 10.3	T= 7.700 / 7.5
LAT= 30.0	U= 26.832 / 6.4	V= 44.099 / 11.1	W= .201162 / 9.5	T= 19.639 / 6.0
LAT= 36.0	U= 21.605 / 5.6	V= 24.873 / 11.3	W= .246699 / 9.3	T= 28.420 / 6.0
LAT= 42.0	U= 21.880 / 4.5	V= 2.877 / 12.0	W= .252078 / 9.3	T= 31.291 / 6.2
LAT= 48.0	U= 28.514 / 3.7	V= 17.919 / 5.5	W= .220659 / 9.5	T= 29.064 / 6.4
LAT= 54.0	U= 36.456 / 3.5	V= 33.358 / 5.8	W= .170089 / 9.8	T= 23.838 / 6.7
LAT= 60.0	U= 43.171 / 3.5	V= 42.166 / 6.1	W= .122177 / 10.0	T= 18.432 / 7.0
LAT= 66.0	U= 43.476 / 3.6	V= 44.832 / 6.4	W= .078322 / 10.4	T= 12.606 / 7.4
LAT= 72.0	U= 40.816 / 3.7	V= 40.660 / 6.6	W= .055731 / 11.0	T= 9.354 / 7.9
LAT= 78.0	U= 30.254 / 3.4	V= 31.118 / 6.9	W= .019006 / 8.7	T= 2.573 / 6.4

Z= 124.175 KM

LAT= 0.0	U= 41.227 / 6.8	V= .007 / 1.7	W= .462037 / .9	T= 63.412 / 10.1
LAT= 6.0	U= 41.132 / 6.7	V= 24.900 / 9.7	W= .421915 / .9	T= 58.282 / 10.1
LAT= 12.0	U= 39.950 / 6.6	V= 44.464 / 9.8	W= .317689 / .7	T= 44.069 / 10.1
LAT= 18.0	U= 37.929 / 6.4	V= 55.141 / 9.9	W= .184188 / .2	T= 24.859 / 10.1
LAT= 24.0	U= 34.749 / 6.1	V= 55.362 / 10.0	W= .107145 / 10.4	T= 5.284 / 9.4
LAT= 30.0	U= 29.750 / 5.8	V= 46.750 / 10.1	W= .170249 / 8.9	T= 12.287 / 5.0
LAT= 36.0	U= 24.088 / 5.3	V= 31.556 / 10.2	W= .235667 / 8.6	T= 22.943 / 4.8
LAT= 42.0	U= 20.428 / 4.4	V= 12.913 / 10.2	W= .261358 / 8.6	T= 27.958 / 5.0
LAT= 48.0	U= 22.224 / 3.5	V= 6.041 / 5.6	W= .245738 / 8.7	T= 27.706 / 5.3
LAT= 54.0	U= 27.724 / 3.1	V= 20.932 / 5.3	W= .204448 / 9.0	T= 23.937 / 5.5
LAT= 60.0	U= 33.817 / 2.9	V= 30.140 / 5.4	W= .161091 / 9.3	T= 19.544 / 5.8
LAT= 66.0	U= 34.931 / 3.0	V= 34.238 / 5.7	W= .111163 / 9.8	T= 13.430 / 6.2
LAT= 72.0	U= 33.633 / 3.0	V= 32.837 / 5.9	W= .082426 / 10.2	T= 9.824 / 6.7
LAT= 78.0	U= 24.376 / 2.7	V= 25.500 / 6.0	W= .022822 / 8.3	T= 2.922 / 5.3

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 129.367 KM

LAT= 0.0	U=	44.557 /	6.0	V=	.007 /	1.6	W=	.548718 /	.4	T=	62.768 /	9.6
LAT= 6.0	U=	44.068 /	6.0	V=	23.588 /	8.8	W=	.506342 /	.4	T=	58.108 /	9.6
LAT= 12.0	U=	43.261 /	5.8	V=	42.516 /	8.9	W=	.395292 /	.2	T=	45.361 /	9.7
LAT= 18.0	U=	41.471 /	5.7	V=	53.716 /	9.0	W=	.241685 /	12.0	T=	27.662 /	9.9
LAT= 24.0	U=	38.582 /	5.4	V=	55.696 /	9.1	W=	.103696 /	10.8	T=	9.340 /	10.5
LAT= 30.0	U=	33.850 /	5.2	V=	49.758 /	9.2	W=	.133426 /	8.4	T=	8.643 /	3.0
LAT= 36.0	U=	27.827 /	4.9	V=	37.398 /	9.3	W=	.218188 /	7.9	T=	19.641 /	3.7
LAT= 42.0	U=	22.102 /	4.3	V=	22.119 /	9.2	W=	.264646 /	7.9	T=	25.526 /	4.0
LAT= 48.0	U=	19.763 /	3.5	V=	7.633 /	8.3	W=	.266091 /	8.1	T=	26.825 /	4.2
LAT= 54.0	U=	22.102 /	2.9	V=	11.079 /	5.4	W=	.235805 /	8.4	T=	23.898 /	4.6
LAT= 60.0	U=	26.429 /	2.4	V=	20.089 /	5.1	W=	.198035 /	8.7	T=	20.413 /	4.9
LAT= 66.0	U=	27.912 /	2.5	V=	25.926 /	5.2	W=	.144291 /	9.3	T=	14.078 /	5.2
LAT= 72.0	U=	28.191 /	2.5	V=	26.468 /	5.3	W=	.111889 /	9.7	T=	10.142 /	5.6
LAT= 78.0	U=	19.540 /	2.1	V=	21.261 /	5.4	W=	.022955 /	8.4	T=	3.357 /	4.2

Z= 135.169 KM

LAT= 0.0	U=	47.523 /	5.5	V=	.006 /	1.5	W=	.624426 /	11.8	T=	56.925 /	9.2
LAT= 6.0	U=	47.350 /	5.4	V=	22.744 /	8.1	W=	.581390 /	11.8	T=	52.953 /	9.2
LAT= 12.0	U=	46.425 /	5.3	V=	41.360 /	8.1	W=	.464686 /	11.8	T=	42.199 /	9.4
LAT= 18.0	U=	44.929 /	5.1	V=	53.110 /	8.2	W=	.299276 /	11.8	T=	27.261 /	9.7
LAT= 24.0	U=	42.303 /	4.9	V=	56.586 /	8.3	W=	.126796 /	11.2	T=	12.739 /	10.7
LAT= 30.0	U=	37.909 /	4.8	V=	52.783 /	8.4	W=	.091469 /	8.1	T=	11.320 /	1.5
LAT= 36.0	U=	31.792 /	4.6	V=	43.376 /	8.5	W=	.191843 /	7.3	T=	19.969 /	2.5
LAT= 42.0	U=	24.789 /	4.2	V=	30.204 /	8.6	W=	.260203 /	7.4	T=	25.692 /	3.1
LAT= 48.0	U=	19.275 /	3.6	V=	16.757 /	8.3	W=	.278030 /	7.5	T=	27.373 /	3.4
LAT= 54.0	U=	18.368 /	2.8	V=	8.475 /	6.8	W=	.258705 /	7.9	T=	25.159 /	3.7
LAT= 60.0	U=	20.749 /	2.2	V=	12.987 /	5.2	W=	.223395 /	8.2	T=	21.833 /	4.0
LAT= 66.0	U=	22.341 /	2.1	V=	18.323 /	4.8	W=	.167675 /	8.8	T=	15.108 /	4.3
LAT= 72.0	U=	23.138 /	2.0	V=	20.732 /	4.8	W=	.137176 /	9.4	T=	10.714 /	4.6
LAT= 78.0	U=	15.144 /	1.6	V=	17.792 /	4.8	W=	.023575 /	9.2	T=	4.090 /	3.3

Z= 141.772 KM

LAT= 0.0	U=	50.307 /	4.9	V=	.005 /	1.2	W=	.689327 /	11.4	T=	48.648 /	8.8
LAT= 6.0	U=	49.969 /	4.9	V=	21.735 /	7.4	W=	.646381 /	11.3	T=	45.349 /	8.8
LAT= 12.0	U=	49.357 /	4.8	V=	39.964 /	7.5	W=	.527007 /	11.4	T=	36.432 /	9.0
LAT= 18.0	U=	47.971 /	4.7	V=	52.251 /	7.6	W=	.357281 /	11.4	T=	24.391 /	9.5
LAT= 24.0	U=	45.467 /	4.5	V=	57.392 /	7.6	W=	.167018 /	11.3	T=	13.868 /	10.7
LAT= 30.0	U=	41.136 /	4.4	V=	55.341 /	7.7	W=	.037583 /	6.1	T=	14.648 /	.8
LAT= 36.0	U=	35.081 /	4.3	V=	47.622 /	7.9	W=	.157431 /	6.5	T=	21.743 /	1.8
LAT= 42.0	U=	27.508 /	4.0	V=	36.451 /	8.1	W=	.247338 /	6.8	T=	27.017 /	2.3
LAT= 48.0	U=	20.584 /	3.6	V=	24.222 /	8.1	W=	.279473 /	6.9	T=	29.086 /	2.7
LAT= 54.0	U=	16.625 /	3.0	V=	13.263 /	7.7	W=	.268327 /	7.4	T=	26.933 /	3.0
LAT= 60.0	U=	16.155 /	2.1	V=	7.865 /	6.1	W=	.236793 /	7.8	T=	23.798 /	3.3
LAT= 66.0	U=	16.642 /	1.9	V=	12.081 /	4.8	W=	.179445 /	8.5	T=	16.969 /	3.5
LAT= 72.0	U=	17.849 /	1.7	V=	16.229 /	4.4	W=	.143298 /	9.1	T=	11.613 /	3.9
LAT= 78.0	U=	11.280 /	1.1	V=	15.547 /	4.2	W=	.026910 /	10.5	T=	4.962 /	2.6

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 149.425 KM

LAT= 0.0	U=	51.797 /	4.5	V=	.005 /	.8	W=	.757576 /	10.9	T=	40.167 /	8.2
LAT= 6.0	U=	51.493 /	4.4	V=	20.411 /	6.8	W=	.714478 /	10.9	T=	37.476 /	8.3
LAT= 12.0	U=	50.884 /	4.4	V=	37.833 /	6.9	W=	.593723 /	11.0	T=	30.091 /	8.5
LAT= 18.0	U=	49.510 /	4.3	V=	50.093 /	6.9	W=	.418609 /	11.0	T=	20.299 /	9.1
LAT= 24.0	U=	46.991 /	4.2	V=	56.012 /	7.0	W=	.218515 /	11.2	T=	12.386 /	10.5
LAT= 30.0	U=	42.729 /	4.2	V=	55.271 /	7.2	W=	.029283 /	11.1	T=	15.710 /	.5
LAT= 36.0	U=	36.823 /	4.0	V=	49.900 /	7.4	W=	.124840 /	5.8	T=	22.911 /	1.3
LAT= 42.0	U=	29.262 /	3.9	V=	40.393 /	7.5	W=	.226947 /	6.1	T=	27.824 /	1.8
LAT= 48.0	U=	21.404 /	3.6	V=	29.002 /	7.7	W=	.273749 /	6.5	T=	29.845 /	2.2
LAT= 54.0	U=	15.551 /	3.2	V=	18.256 /	7.7	W=	.266073 /	6.8	T=	28.128 /	2.5
LAT= 60.0	U=	12.312 /	2.4	V=	8.914 /	7.3	W=	.229457 /	7.3	T=	25.077 /	2.8
LAT= 66.0	U=	11.653 /	2.0	V=	6.495 /	5.1	W=	.160849 /	8.1	T=	18.206 /	2.9
LAT= 72.0	U=	13.215 /	1.5	V=	10.284 /	3.9	W=	.140921 /	8.9	T=	12.879 /	3.3
LAT= 78.0	U=	7.484 /	.8	V=	12.204 /	3.6	W=	.044293 /	11.3	T=	5.961 /	2.2

Z= 158.420 KM

LAT= 0.0	U=	51.606 /	4.1	V=	.004 /	12.0	W=	.835883 /	10.4	T=	34.709 /	7.6
LAT= 6.0	U=	51.229 /	4.1	V=	18.687 /	6.2	W=	.792108 /	10.4	T=	32.375 /	7.6
LAT= 12.0	U=	50.385 /	4.0	V=	34.919 /	6.2	W=	.668626 /	10.5	T=	25.757 /	7.9
LAT= 18.0	U=	48.914 /	4.0	V=	46.594 /	6.4	W=	.487311 /	10.7	T=	16.710 /	8.4
LAT= 24.0	U=	46.225 /	3.9	V=	52.934 /	6.5	W=	.278867 /	10.9	T=	10.034 /	10.1
LAT= 30.0	U=	42.022 /	3.8	V=	53.497 /	6.6	W=	.080889 /	11.5	T=	13.688 /	.1
LAT= 36.0	U=	36.522 /	3.8	V=	49.137 /	6.9	W=	.090325 /	4.6	T=	21.211 /	.9
LAT= 42.0	U=	29.309 /	3.7	V=	41.198 /	7.1	W=	.203154 /	5.4	T=	26.572 /	1.5
LAT= 48.0	U=	21.515 /	3.6	V=	31.554 /	7.3	W=	.260167 /	5.7	T=	28.974 /	1.8
LAT= 54.0	U=	14.873 /	3.4	V=	21.424 /	7.6	W=	.257691 /	6.2	T=	27.486 /	2.1
LAT= 60.0	U=	9.496 /	2.9	V=	11.581 /	7.7	W=	.210708 /	6.6	T=	25.263 /	2.3
LAT= 66.0	U=	8.438 /	2.4	V=	3.704 /	6.8	W=	.136083 /	7.6	T=	18.572 /	2.6
LAT= 72.0	U=	8.663 /	1.5	V=	5.188 /	3.4	W=	.107965 /	8.6	T=	13.519 /	2.8
LAT= 78.0	U=	4.273 /	.8	V=	9.199 /	3.1	W=	.069476 /	11.8	T=	6.221 /	1.9

Z= 181.310 KM

LAT= 0.0	U=	44.857 /	3.4	V=	.003 /	9.6	W=	1.009620 /	9.6	T=	36.945 /	6.5
LAT= 6.0	U=	44.165 /	3.3	V=	15.271 /	4.9	W=	.963987 /	9.6	T=	35.521 /	6.4
LAT= 12.0	U=	42.626 /	3.3	V=	28.604 /	5.0	W=	.835160 /	9.6	T=	29.940 /	6.6
LAT= 18.0	U=	40.024 /	3.4	V=	38.551 /	5.1	W=	.644475 /	9.9	T=	21.301 /	6.9
LAT= 24.0	U=	37.069 /	3.3	V=	44.158 /	5.3	W=	.423452 /	10.2	T=	11.234 /	7.5
LAT= 30.0	U=	33.468 /	3.3	V=	45.113 /	5.5	W=	.210890 /	10.9	T=	5.085 /	10.0
LAT= 36.0	U=	29.536 /	3.3	V=	41.801 /	5.8	W=	.084321 /	1.4	T=	10.346 /	.2
LAT= 42.0	U=	23.528 /	3.3	V=	35.456 /	6.1	W=	.176164 /	3.6	T=	16.126 /	.8
LAT= 48.0	U=	17.151 /	3.4	V=	27.491 /	6.5	W=	.264617 /	4.1	T=	20.028 /	1.2
LAT= 54.0	U=	11.355 /	3.7	V=	19.290 /	7.0	W=	.278348 /	4.6	T=	20.261 /	1.6
LAT= 60.0	U=	7.461 /	4.5	V=	12.443 /	7.6	W=	.227505 /	4.6	T=	21.494 /	1.9
LAT= 66.0	U=	6.836 /	4.8	V=	6.021 /	8.5	W=	.112717 /	4.6	T=	16.953 /	2.0
LAT= 72.0	U=	2.588 /	4.9	V=	2.495 /	11.0	W=	.039202 /	5.8	T=	12.584 /	2.3
LAT= 78.0	U=	2.757 /	5.8	V=	4.632 /	1.5	W=	.120521 /	.5	T=	5.206 /	1.7

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 209.865 KM

LAT= 0.0	U=	34.684 /	2.6	V=	.005 /	8.6	W=	1.122000 /	8.9	T=	47.094 /	6.1
LAT= 6.0	U=	33.7[illegible] /	2.6	V=	13.403 /	3.8	W=	1.081332 /	8.9	T=	45.863 /	6.1
LAT= 12.0	U=	31.794 /	2.5	V=	25.185 /	3.9	W=	.952078 /	9.0	T=	40.666 /	6.2
LAT= 18.0	U=	29.2[illegible]6 /	2.5	V=	34.250 /	4.0	W=	.765887 /	9.3	T=	33.165 /	6.4
LAT= 24.0	U=	26.[illegible]72 /	2.5	V=	39.197 /	4.2	W=	.549961 /	9.7	T=	24.134 /	6.7
LAT= 30.0	U=	23.924 /	2.4	V=	40.000 /	4.3	W=	.338392 /	10.5	T=	14.630 /	7.1
LAT= 36.0	U=	21.274 /	2.4	V=	36.502 /	4.6	W=	.216985 /	.1	T=	6.275 /	8.0
LAT= 42.0	U=	16.875 /	2.4	V=	29.820 /	4.9	W=	.246237 /	2.1	T=	3.915 /	11.2
LAT= 48.0	U=	10.980 /	2.6	V=	21.866 /	5.2	W=	.344080 /	3.1	T=	8.119 /	.6
LAT= 54.0	U=	5.607 /	3.6	V=	13.185 /	6.0	W=	.389019 /	3.6	T=	10.313 /	1.3
LAT= 60.0	U=	7.834 /	5.4	V=	8.082 /	7.3	W=	.357365 /	3.5	T=	16.704 /	1.5
LAT= 66.0	U=	9.605 /	5.7	V=	6.317 /	9.0	W=	.244887 /	3.2	T=	14.786 /	1.6
LAT= 72.0	U=	7.850 /	6.4	V=	6.088 /	10.4	W=	.142623 /	3.7	T=	10.825 /	2.0
LAT= 78.0	U=	6.518 /	6.1	V=	5.476 /	11.7	W=	.140728 /	1.0	T=	3.836 /	1.7

Z= 240.988 KM

LAT= 0.0	U=	28.827 /	1.7	V=	.007 /	8.4	W=	1.133088 /	8.4	T=	54.795 /	6.0
LAT= 6.0	U=	28.108 /	1.6	V=	13.159 /	3.0	W=	1.087935 /	8.4	T=	53.251 /	6.0
LAT= 12.0	U=	27.119 /	1.6	V=	24.868 /	3.1	W=	.966917 /	8.6	T=	49.371 /	6.1
LAT= 18.0	U=	25.674 /	1.5	V=	33.871 /	3.3	W=	.788237 /	9.0	T=	43.137 /	6.3
LAT= 24.0	U=	24.213 /	1.5	V=	39.267 /	3.4	W=	.590251 /	9.5	T=	34.580 /	6.5
LAT= 30.0	U=	22.452 /	1.5	V=	40.450 /	3.6	W=	.394759 /	10.4	T=	24.591 /	6.8
LAT= 36.0	U=	20.130 /	1.6	V=	38.040 /	3.8	W=	.289109 /	12.0	T=	15.002 /	7.2
LAT= 42.0	U=	15.792 /	1.6	V=	31.935 /	4.0	W=	.357295 /	1.7	T=	7.784 /	7.8
LAT= 48.0	U=	9.385 /	1.7	V=	22.597 /	4.3	W=	.478763 /	2.6	T=	2.532 /	10.1
LAT= 54.0	U=	2.238 /	3.0	V=	11.580 /	4.9	W=	.530284 /	3.1	T=	3.907 /	.8
LAT= 60.0	U=	8.658 /	5.9	V=	4.861 /	6.8	W=	.469529 /	3.0	T=	13.739 /	1.3
LAT= 66.0	U=	11.908 /	6.0	V=	6.461 /	9.3	W=	.339806 /	2.8	T=	13.669 /	1.4
LAT= 72.0	U=	11.747 /	6.7	V=	8.233 /	10.2	W=	.229392 /	3.5	T=	10.105 /	2.0
LAT= 78.0	U=	9.092 /	6.3	V=	8.087 /	11.3	W=	.136527 /	1.6	T=	3.208 /	1.5

Z= 272.801 KM

LAT= 0.0	U=	28.232 /	1.1	V=	.008 /	8.2	W=	1.090134 /	7.9	T=	59.308 /	6.0
LAT= 6.0	U=	27.767 /	1.0	V=	13.409 /	2.6	W=	1.047658 /	8.0	T=	57.975 /	6.0
LAT= 12.0	U=	27.285 /	1.0	V=	25.425 /	2.7	W=	.911231 /	8.2	T=	54.303 /	6.1
LAT= 18.0	U=	26.674 /	1.0	V=	34.890 /	2.8	W=	.734056 /	8.6	T=	48.089 /	6.2
LAT= 24.0	U=	25.740 /	.9	V=	41.332 /	3.0	W=	.542552 /	9.4	T=	39.095 /	6.5
LAT= 30.0	U=	24.108 /	1.1	V=	43.466 /	3.2	W=	.388873 /	10.5	T=	29.517 /	6.7
LAT= 36.0	U=	22.107 /	1.1	V=	41.737 /	3.4	W=	.340308 /	.2	T=	20.057 /	7.0
LAT= 42.0	U=	17.398 /	1.1	V=	35.365 /	3.6	W=	.452111 /	1.7	T=	11.657 /	7.5
LAT= 48.0	U=	9.483 /	1.2	V=	25.318 /	3.8	W=	.601024 /	2.5	T=	5.504 /	8.5
LAT= 54.0	U=	.857 /	1.1	V=	12.299 /	4.2	W=	.657803 /	3.0	T=	1.391 /	.1
LAT= 60.0	U=	9.925 /	5.9	V=	3.240 /	6.3	W=	.589842 /	2.7	T=	12.598 /	1.2
LAT= 66.0	U=	13.903 /	6.1	V=	6.956 /	9.6	W=	.410624 /	2.6	T=	13.253 /	1.3
LAT= 72.0	U=	14.645 /	6.7	V=	10.062 /	10.4	W=	.265262 /	3.4	T=	9.522 /	1.8
LAT= 78.0	U=	10.592 /	6.5	V=	9.790 /	11.1	W=	.120000 /	1.9	T=	2.911 /	1.4

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 304.762 KM

LAT= 0.0	U=	29.103 /	.7	V=	.008 /	8.1	W=	1.033840 /	7.5	T=	60.719 /	6.0
LAT= 6.0	U=	28.768 /	.6	V=	13.733 /	2.4	W=	.975863 /	7.6	T=	59.788 /	6.0
LAT= 12.0	U=	28.517 /	.7	V=	26.096 /	2.5	W=	.835055 /	7.9	T=	55.840 /	6.1
LAT= 18.0	U=	28.209 /	.7	V=	35.977 /	2.6	W=	.632646 /	8.3	T=	49.725 /	6.2
LAT= 24.0	U=	27.469 /	.7	V=	42.881 /	2.8	W=	.449043 /	9.2	T=	41.336 /	6.4
LAT= 30.0	U=	26.302 /	.8	V=	45.445 /	3.0	W=	.332499 /	10.7	T=	31.634 /	6.7
LAT= 36.0	U=	23.320 /	1.0	V=	43.241 /	3.2	W=	.371668 /	.6	T=	21.887 /	7.0
LAT= 42.0	U=	17.907 /	1.0	V=	36.871 /	3.4	W=	.533373 /	1.9	T=	13.249 /	7.5
LAT= 48.0	U=	9.949 /	1.0	V=	26.570 /	3.6	W=	.698677 /	2.5	T=	5.935 /	8.3
LAT= 54.0	U=	1.129 /	11.0	V=	12.907 /	3.9	W=	.752728 /	3.0	T=	1.496 /	10.3
LAT= 60.0	U=	10.867 /	6.1	V=	2.252 /	6.0	W=	.649187 /	2.5	T=	12.051 /	1.1
LAT= 66.0	U=	15.229 /	6.0	V=	7.661 /	9.8	W=	.457189 /	2.4	T=	12.949 /	1.2
LAT= 72.0	U=	16.265 /	6.8	V=	10.810 /	10.3	W=	.300180 /	3.2	T=	9.445 /	1.9
LAT= 78.0	U=	11.402 /	6.5	V=	11.182 /	11.2	W=	.119140 /	2.0	T=	2.799 /	1.4

Z= 336.754 KM

LAT= 0.0	U=	30.138 /	.5	V=	.008 /	8.0	W=	.983883 /	7.1	T=	62.467 /	5.9
LAT= 6.0	U=	29.853 /	.5	V=	14.276 /	2.2	W=	.919420 /	7.1	T=	61.177 /	5.9
LAT= 12.0	U=	29.767 /	.5	V=	26.916 /	2.4	W=	.757722 /	7.4	T=	57.349 /	6.1
LAT= 18.0	U=	29.777 /	.5	V=	37.239 /	2.5	W=	.528054 /	7.9	T=	51.662 /	6.3
LAT= 24.0	U=	28.854 /	.6	V=	44.555 /	2.7	W=	.313590 /	9.1	T=	43.252 /	6.5
LAT= 30.0	U=	27.252 /	.7	V=	47.455 /	2.9	W=	.262868 /	11.3	T=	33.415 /	6.7
LAT= 36.0	U=	24.558 /	.9	V=	45.430 /	3.1	W=	.401837 /	1.0	T=	23.448 /	7.1
LAT= 42.0	U=	18.347 /	.9	V=	39.161 /	3.3	W=	.609782 /	2.0	T=	14.035 /	7.5
LAT= 48.0	U=	9.971 /	.8	V=	28.337 /	3.5	W=	.786191 /	2.6	T=	6.125 /	8.1
LAT= 54.0	U=	1.681 /	10.8	V=	13.428 /	3.7	W=	.838121 /	2.9	T=	1.394 /	9.7
LAT= 60.0	U=	11.467 /	6.1	V=	1.825 /	5.5	W=	.678219 /	2.5	T=	11.953 /	1.1
LAT= 66.0	U=	16.091 /	6.0	V=	7.815 /	9.8	W=	.470039 /	2.2	T=	12.941 /	1.2
LAT= 72.0	U=	17.284 /	6.8	V=	11.616 /	10.4	W=	.290694 /	3.0	T=	9.260 /	1.7
LAT= 78.0	U=	11.980 /	6.7	V=	11.490 /	11.2	W=	.105641 /	1.9	T=	2.738 /	1.5

Z= 368.753 KM

LAT= 0.0	U=	31.070 /	.4	V=	.009 /	7.9	W=	.959416 /	6.5	T=	64.185 /	5.9
LAT= 6.0	U=	30.795 /	.3	V=	14.448 /	2.2	W=	.887554 /	6.7	T=	62.878 /	5.9
LAT= 12.0	U=	30.774 /	.3	V=	27.527 /	2.2	W=	.702194 /	6.8	T=	58.997 /	6.1
LAT= 18.0	U=	30.735 /	.4	V=	38.148 /	2.4	W=	.438015 /	7.3	T=	53.227 /	6.3
LAT= 24.0	U=	29.952 /	.5	V=	45.071 /	2.6	W=	.178745 /	8.7	T=	44.650 /	6.5
LAT= 30.0	U=	28.306 /	.6	V=	48.211 /	2.8	W=	.213460 /	.2	T=	34.580 /	6.7
LAT= 36.0	U=	24.977 /	.8	V=	47.550 /	3.0	W=	.448036 /	1.4	T=	24.339 /	7.0
LAT= 42.0	U=	19.183 /	.8	V=	40.413 /	3.2	W=	.682712 /	2.2	T=	14.594 /	7.4
LAT= 48.0	U=	10.434 /	.8	V=	29.327 /	3.4	W=	.861143 /	2.6	T=	7.722 /	8.2
LAT= 54.0	U=	2.255 /	10.0	V=	14.845 /	3.6	W=	.914799 /	2.9	T=	2.586 /	9.3
LAT= 60.0	U=	11.755 /	6.0	V=	1.129 /	5.6	W=	.717205 /	2.3	T=	11.829 /	1.1
LAT= 66.0	U=	16.593 /	6.0	V=	8.071 /	9.8	W=	.489808 /	2.0	T=	13.106 /	1.3
LAT= 72.0	U=	17.846 /	6.7	V=	11.876 /	10.4	W=	.313362 /	2.8	T=	9.526 /	1.8
LAT= 78.0	U=	12.310 /	6.6	V=	11.753 /	11.2	W=	.118443 /	1.9	T=	2.801 /	1.6

Table B3. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 400.753 KM

LAT= 0.0	U=	31.919	/ .3	V=	.009	/ 7.9	W=	.976388	/ 6.1	T=	66.031	/ 5.9
LAT= 6.0	U=	31.629	/ .3	V=	14.920	/ 2.1	W=	.900407	/ 6.1	T=	64.700	/ 5.9
LAT= 12.0	U=	31.590	/ .3	V=	28.168	/ 2.2	W=	.699062	/ 6.1	T=	60.740	/ 6.1
LAT= 18.0	U=	31.679	/ .3	V=	39.073	/ 2.4	W=	.398954	/ 6.4	T=	54.855	/ 6.3
LAT= 24.0	U=	30.833	/ .5	V=	46.787	/ 2.5	W=	.075418	/ 6.1	T=	46.080	/ 6.5
LAT= 30.0	U=	29.230	/ .6	V=	50.178	/ 2.8	W=	.235331	/ 1.4	T=	35.762	/ 6.7
LAT= 36.0	U=	25.798	/ .8	V=	48.791	/ 3.0	W=	.505819	/ 1.7	T=	25.248	/ 7.0
LAT= 42.0	U=	19.904	/ .8	V=	41.587	/ 3.2	W=	.753263	/ 2.4	T=	16.104	/ 7.4
LAT= 48.0	U=	10.923	/ .7	V=	29.906	/ 3.3	W=	.927709	/ 2.7	T=	8.123	/ 8.1
LAT= 54.0	U=	2.662	/ 10.1	V=	14.265	/ 3.5	W=	.971444	/ 2.9	T=	2.712	/ 9.0
LAT= 60.0	U=	12.054	/ 6.0	V=	.738	/ 5.5	W=	.728354	/ 2.2	T=	11.832	/ 1.1
LAT= 66.0	U=	17.007	/ 5.9	V=	8.093	/ 9.9	W=	.507729	/ 1.7	T=	13.231	/ 1.3
LAT= 72.0	U=	18.342	/ 6.7	V=	12.095	/ 10.4	W=	.317703	/ 2.6	T=	9.611	/ 1.8
LAT= 78.0	U=	12.521	/ 6.7	V=	11.985	/ 11.2	W=	.120725	/ 1.7	T=	2.780	/ 1.7

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice

Z= 0.000 KM											
LAT=-78.0	U=	.033	3.2	V=	.038	.5	W=	0.000000	12.0	T=	0.000 / 5.2
LAT=-72.0	U=	.039	2.7	V=	.038	11.7	W=	0.000000	12.0	T=	0.000 / 11.1
LAT=-66.0	U=	.052	2.4	V=	.052	11.3	W=	0.000000	12.0	T=	.001 / 10.9
LAT=-60.0	U=	.078	2.6	V=	.079	11.5	W=	0.000000	12.0	T=	.002 / 10.7
LAT=-54.0	U=	.112	2.7	V=	.117	11.7	W=	0.000000	12.0	T=	.004 / 10.5
LAT=-48.0	U=	.147	2.8	V=	.160	11.8	W=	0.000000	12.0	T=	.005 / 10.2
LAT=-42.0	U=	.172	2.9	V=	.194	11.9	W=	0.000000	12.0	T=	.007 / 9.9
LAT=-36.0	U=	.185	2.8	V=	.215	12.0	W=	0.000000	12.0	T=	.011 / 9.7
LAT=-30.0	U=	.185	2.8	V=	.211	11.9	W=	0.000000	12.0	T=	.016 / 9.6
LAT=-24.0	U=	.177	2.7	V=	.184	11.6	W=	0.000000	12.0	T=	.022 / 9.6
LAT=-18.0	U=	.169	2.6	V=	.144	11.4	W=	0.000000	12.0	T=	.031 / 9.6
LAT=-12.0	U=	.166	2.7	V=	.099	11.2	W=	0.000000	12.0	T=	.039 / 9.6
LAT= -6.0	U=	.168	2.8	V=	.051	11.0	W=	0.000000	12.0	T=	.045 / 9.6
LAT= 0.0	U=	.172	2.8	V=	.006	11.7	W=	0.000000	12.0	T=	.049 / 9.6
LAT= 6.0	U=	.175	2.7	V=	.035	4.6	W=	0.000000	12.0	T=	.049 / 9.6
LAT= 12.0	U=	.178	2.7	V=	.073	5.0	W=	0.000000	12.0	T=	.044 / 9.6
LAT= 18.0	U=	.183	2.7	V=	.114	5.3	W=	0.000000	12.0	T=	.036 / 9.6
LAT= 24.0	U=	.193	2.7	V=	.161	5.6	W=	0.000000	12.0	T=	.027 / 9.6
LAT= 30.0	U=	.209	2.8	V=	.208	5.8	W=	0.000000	12.0	T=	.016 / 9.6
LAT= 36.0	U=	.226	2.9	V=	.244	5.8	W=	0.000000	12.0	T=	.009 / 9.6
LAT= 42.0	U=	.235	2.8	V=	.258	5.9	W=	0.000000	12.0	T=	.002 / 10.1
LAT= 48.0	U=	.230	2.7	V=	.250	5.8	W=	0.000000	12.0	T=	.002 / 2.0
LAT= 54.0	U=	.211	2.6	V=	.222	5.6	W=	0.000000	12.0	T=	.003 / 2.1
LAT= 60.0	U=	.176	2.6	V=	.183	5.4	W=	0.000000	12.0	T=	.004 / 2.5
LAT= 66.0	U=	.144	2.5	V=	.141	5.4	W=	0.000000	12.0	T=	.002 / 2.1
LAT= 72.0	U=	.110	2.5	V=	.106	5.5	W=	0.000000	12.0	T=	.001 / 2.8
LAT= 78.0	U=	.080	2.7	V=	.080	5.9	W=	0.000000	12.0	T=	.001 / 4.5
Z= 2.078 KM											
LAT=-78.0	U=	.028	3.9	V=	.024	.8	W=	.000043	7.5	T=	.001 / 4.8
LAT=-72.0	U=	.048	3.8	V=	.046	.7	W=	.000017	9.3	T=	.001 / 6.7
LAT=-66.0	U=	.074	3.6	V=	.075	.6	W=	.000036	11.9	T=	.001 / 9.2
LAT=-60.0	U=	.105	3.5	V=	.110	.6	W=	.000064	.3	T=	.003 / 9.3
LAT=-54.0	U=	.138	3.4	V=	.150	.4	W=	.000080	.2	T=	.005 / 9.3
LAT=-48.0	U=	.170	3.2	V=	.186	.2	W=	.000077	12.0	T=	.007 / 9.1
LAT=-42.0	U=	.192	3.1	V=	.217	.1	W=	.000055	11.4	T=	.009 / 9.0
LAT=-36.0	U=	.204	2.9	V=	.235	11.9	W=	.000035	9.6	T=	.013 / 9.0
LAT=-30.0	U=	.206	3.0	V=	.233	11.9	W=	.000055	7.6	T=	.019 / 8.9
LAT=-24.0	U=	.199	2.9	V=	.208	11.8	W=	.000078	6.8	T=	.025 / 8.9
LAT=-18.0	U=	.189	2.9	V=	.164	11.7	W=	.000077	6.2	T=	.034 / 8.8
LAT=-12.0	U=	.182	2.9	V=	.111	11.7	W=	.000062	5.5	T=	.042 / 8.8
LAT= -6.0	U=	.180	2.9	V=	.054	11.8	W=	.000043	4.2	T=	.050 / 8.8
LAT= 0.0	U=	.181	2.9	V=	.009	2.3	W=	.000036	2.9	T=	.054 / 8.8
LAT= 6.0	U=	.185	2.9	V=	.044	5.3	W=	.000018	2.2	T=	.053 / 8.8
LAT= 12.0	U=	.191	2.8	V=	.083	5.7	W=	.000021	6.9	T=	.047 / 8.8
LAT= 18.0	U=	.200	2.9	V=	.125	5.8	W=	.000062	6.9	T=	.038 / 8.8
LAT= 24.0	U=	.211	3.0	V=	.170	5.9	W=	.000102	6.7	T=	.027 / 8.8
LAT= 30.0	U=	.228	3.0	V=	.217	6.0	W=	.000118	6.4	T=	.016 / 8.8
LAT= 36.0	U=	.247	3.0	V=	.258	6.0	W=	.000109	6.0	T=	.008 / 9.0
LAT= 42.0	U=	.261	3.0	V=	.284	6.0	W=	.000083	5.3	T=	.002 / 10.5
LAT= 48.0	U=	.266	3.0	V=	.291	6.0	W=	.000063	4.5	T=	.003 / 1.6
LAT= 54.0	U=	.259	2.9	V=	.277	5.9	W=	.000049	3.5	T=	.004 / 1.8
LAT= 60.0	U=	.231	2.9	V=	.244	5.9	W=	.000038	2.8	T=	.005 / 2.2
LAT= 66.0	U=	.197	2.8	V=	.199	5.9	W=	.000018	3.0	T=	.003 / 2.0
LAT= 72.0	U=	.149	2.8	V=	.147	5.8	W=	.000012	6.0	T=	.002 / 2.7
LAT= 78.0	U=	.097	2.7	V=	.093	5.7	W=	.000035	7.1	T=	.002 / 3.6

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 4.161 KM											
LAT=-78.0	U=	.050	3.9	V=	.047	.9	W=	.000039	7.8	T=	.001 / 5.3
LAT=-72.0	U=	.078	3.8	V=	.078	.8	W=	.000038	10.5	T=	.002 / 8.3
LAT=-66.0	U=	.103	3.7	V=	.107	.7	W=	.000077	11.5	T=	.003 / 9.0
LAT=-60.0	U=	.126	3.6	V=	.134	.6	W=	.000114	11.6	T=	.005 / 9.0
LAT=-54.0	U=	.146	3.4	V=	.158	.4	W=	.000139	11.4	T=	.007 / 9.0
LAT=-48.0	U=	.164	3.1	V=	.181	.2	W=	.000142	11.2	T=	.010 / 8.9
LAT=-42.0	U=	.181	3.0	V=	.201	12.0	W=	.000120	10.7	T=	.012 / 8.9
LAT=-36.0	U=	.192	2.9	V=	.216	11.8	W=	.000087	9.6	T=	.016 / 8.9
LAT=-30.0	U=	.198	2.9	V=	.219	11.8	W=	.000087	7.8	T=	.020 / 8.9
LAT=-24.0	U=	.198	2.9	V=	.206	11.8	W=	.000119	6.6	T=	.026 / 8.9
LAT=-18.0	U=	.191	2.9	V=	.174	11.8	W=	.000138	5.8	T=	.034 / 8.9
LAT=-12.0	U=	.185	2.9	V=	.128	11.8	W=	.000131	5.2	T=	.042 / 8.9
LAT= -6.0	U=	.180	2.9	V=	.070	12.0	W=	.000103	4.5	T=	.050 / 8.9
LAT= 0.0	U=	.180	2.9	V=	.011	1.4	W=	.000064	3.8	T=	.054 / 8.9
LAT= 6.0	U=	.184	2.9	V=	.051	5.6	W=	.000024	3.6	T=	.054 / 8.9
LAT= 12.0	U=	.192	2.8	V=	.101	5.8	W=	.000040	7.0	T=	.047 / 8.9
LAT= 18.0	U=	.201	2.9	V=	.144	5.9	W=	.000100	6.9	T=	.038 / 8.9
LAT= 24.0	U=	.212	3.0	V=	.180	5.9	W=	.000167	6.6	T=	.026 / 8.9
LAT= 30.0	U=	.222	3.0	V=	.212	5.9	W=	.000211	6.3	T=	.015 / 8.9
LAT= 36.0	U=	.233	3.0	V=	.239	5.9	W=	.000217	5.9	T=	.006 / 9.1
LAT= 42.0	U=	.241	3.0	V=	.258	5.9	W=	.000189	5.6	T=	.001 / 11.4
LAT= 48.0	U=	.246	3.0	V=	.265	6.0	W=	.000147	5.3	T=	.003 / 1.8
LAT= 54.0	U=	.244	3.0	V=	.260	6.0	W=	.000097	4.8	T=	.004 / 1.8
LAT= 60.0	U=	.225	3.0	V=	.240	6.1	W=	.000059	4.2	T=	.004 / 2.2
LAT= 66.0	U=	.201	3.0	V=	.205	6.1	W=	.000034	4.4	T=	.002 / 2.1
LAT= 72.0	U=	.156	3.0	V=	.157	6.1	W=	.000021	5.0	T=	.002 / 2.9
LAT= 78.0	U=	.104	2.9	V=	.104	6.1	W=	.000027	6.7	T=	.002 / 3.6
Z= 9.525 KM											
LAT=-78.0	U=	.083	3.1	V=	.082	12.0	W=	.000026	9.0	T=	.001 / 7.2
LAT=-72.0	U=	.122	3.1	V=	.123	.1	W=	.000067	10.2	T=	.003 / 8.1
LAT=-66.0	U=	.152	3.1	V=	.157	.1	W=	.000116	10.5	T=	.007 / 8.2
LAT=-60.0	U=	.172	3.1	V=	.182	.1	W=	.000167	10.5	T=	.010 / 8.2
LAT=-54.0	U=	.183	3.1	V=	.197	.1	W=	.000230	10.4	T=	.014 / 8.3
LAT=-48.0	U=	.188	3.0	V=	.204	12.0	W=	.000276	10.3	T=	.019 / 8.3
LAT=-42.0	U=	.190	2.9	V=	.205	12.0	W=	.000278	10.0	T=	.023 / 8.4
LAT=-36.0	U=	.190	3.0	V=	.201	12.0	W=	.000237	9.7	T=	.026 / 8.5
LAT=-30.0	U=	.190	3.0	V=	.196	11.9	W=	.000153	8.9	T=	.028 / 8.7
LAT=-24.0	U=	.189	2.9	V=	.187	11.9	W=	.000127	6.7	T=	.030 / 8.8
LAT=-18.0	U=	.187	2.9	V=	.168	11.9	W=	.000208	5.4	T=	.034 / 8.9
LAT=-12.0	U=	.183	2.9	V=	.136	11.9	W=	.000264	5.0	T=	.039 / 9.0
LAT= -6.0	U=	.178	2.9	V=	.090	11.9	W=	.000260	4.7	T=	.045 / 9.1
LAT= 0.0	U=	.177	2.9	V=	.028	11.9	W=	.000192	4.6	T=	.051 / 9.0
LAT= 6.0	U=	.180	2.9	V=	.042	5.7	W=	.000107	5.1	T=	.052 / 8.9
LAT= 12.0	U=	.190	2.9	V=	.110	5.8	W=	.000097	6.4	T=	.047 / 8.8
LAT= 18.0	U=	.200	2.9	V=	.165	5.8	W=	.000164	6.8	T=	.038 / 8.8
LAT= 24.0	U=	.211	2.9	V=	.205	5.8	W=	.000264	6.6	T=	.024 / 8.8
LAT= 30.0	U=	.218	2.9	V=	.229	5.8	W=	.000368	6.3	T=	.011 / 8.6
LAT= 36.0	U=	.219	2.9	V=	.236	5.9	W=	.000435	6.1	T=	.001 / 6.3
LAT= 42.0	U=	.212	2.9	V=	.231	6.0	W=	.000437	6.0	T=	.007 / 2.8
LAT= 48.0	U=	.201	3.0	V=	.219	6.0	W=	.000389	5.9	T=	.010 / 2.7
LAT= 54.0	U=	.187	3.1	V=	.199	6.1	W=	.000297	5.8	T=	.009 / 2.6
LAT= 60.0	U=	.163	3.1	V=	.175	6.1	W=	.000193	5.7	T=	.007 / 2.7
LAT= 66.0	U=	.143	3.1	V=	.146	6.2	W=	.000138	5.9	T=	.005 / 2.8
LAT= 72.0	U=	.109	3.1	V=	.111	6.2	W=	.000069	5.4	T=	.003 / 2.4
LAT= 78.0	U=	.072	3.0	V=	.074	6.2	W=	.000023	4.2	T=	.001 / 1.9

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 14.879 KM														
LAT=-78.0	U=	.121	2.5	V=	.118	11.5	W=	.000026	7.9	T=	.002	6.7
LAT=-72.0	U=	.175	2.5	V=	.173	11.5	W=	.000054	8.9	T=	.005	7.3
LAT=-66.0	U=	.217	2.5	V=	.221	11.5	W=	.000099	9.5	T=	.010	7.6
LAT=-60.0	U=	.247	2.6	V=	.258	11.6	W=	.000153	9.3	T=	.015	7.6
LAT=-54.0	U=	.260	2.6	V=	.278	11.6	W=	.000238	9.2	T=	.023	7.7
LAT=-48.0	U=	.257	2.7	V=	.278	11.7	W=	.000322	9.2	T=	.032	7.7
LAT=-42.0	U=	.245	2.8	V=	.262	11.8	W=	.000369	9.1	T=	.040	7.8
LAT=-36.0	U=	.226	2.9	V=	.234	12.0	W=	.000368	8.9	T=	.045	8.0
LAT=-30.0	U=	.210	3.0	V=	.202	.1	W=	.000296	8.6	T=	.049	8.4
LAT=-24.0	U=	.199	3.0	V=	.174	.2	W=	.000196	7.5	T=	.053	8.7
LAT=-18.0	U=	.194	3.0	V=	.152	12.0	W=	.000212	5.6	T=	.057	9.1
LAT=-12.0	U=	.192	3.0	V=	.129	11.9	W=	.000314	4.7	T=	.063	9.2
LAT= -6.0	U=	.190	3.0	V=	.101	11.7	W=	.000382	4.4	T=	.068	9.3
LAT= 0.0	U=	.188	3.0	V=	.055	11.3	W=	.000367	4.4	T=	.072	9.3
LAT= 6.0	U=	.189	3.0	V=	.026	7.1	W=	.000306	5.0	T=	.071	9.1
LAT= 12.0	U=	.199	2.9	V=	.110	5.9	W=	.000301	5.8	T=	.064	8.9
LAT= 18.0	U=	.214	2.8	V=	.191	5.8	W=	.000381	6.4	T=	.052	8.7
LAT= 24.0	U=	.231	2.9	V=	.257	5.7	W=	.000496	6.6	T=	.035	8.4
LAT= 30.0	U=	.240	2.9	V=	.287	5.7	W=	.000587	6.5	T=	.018	7.9
LAT= 36.0	U=	.231	2.8	V=	.275	5.8	W=	.000619	6.4	T=	.007	6.1
LAT= 42.0	U=	.201	2.9	V=	.234	5.9	W=	.000578	6.2	T=	.011	3.7
LAT= 48.0	U=	.161	3.0	V=	.180	6.0	W=	.000491	6.1	T=	.014	3.2
LAT= 54.0	U=	.116	3.2	V=	.122	6.2	W=	.000365	6.1	T=	.013	2.9
LAT= 60.0	U=	.070	3.5	V=	.076	6.5	W=	.000229	5.8	T=	.011	2.7
LAT= 66.0	U=	.043	3.8	V=	.045	6.8	W=	.000182	6.2	T=	.009	2.9
LAT= 72.0	U=	.023	4.5	V=	.025	7.2	W=	.000071	5.3	T=	.004	2.2
LAT= 78.0	U=	.013	5.1	V=	.013	7.9	W=	.000034	2.5	T=	.002	11.2
Z= 20.239 KM												
LAT=-78.0	U=	.167	1.9	V=	.166	11.0	W=	.000083	5.8	T=	.006	3.1
LAT=-72.0	U=	.244	1.9	V=	.242	11.0	W=	.000125	6.1	T=	.007	3.7
LAT=-66.0	U=	.306	2.0	V=	.308	11.0	W=	.000150	6.5	T=	.009	4.8
LAT=-60.0	U=	.341	2.0	V=	.356	11.0	W=	.000250	6.5	T=	.015	4.6
LAT=-54.0	U=	.352	2.0	V=	.378	11.0	W=	.000369	6.6	T=	.023	4.8
LAT=-48.0	U=	.339	2.2	V=	.369	11.2	W=	.000470	6.8	T=	.030	5.1
LAT=-42.0	U=	.315	2.4	V=	.339	11.5	W=	.000531	7.0	T=	.034	5.4
LAT=-36.0	U=	.286	2.6	V=	.299	11.9	W=	.000541	7.1	T=	.035	5.9
LAT=-30.0	U=	.267	3.0	V=	.266	.3	W=	.000471	7.3	T=	.036	6.9
LAT=-24.0	U=	.259	3.1	V=	.245	.6	W=	.000334	7.4	T=	.042	7.9
LAT=-18.0	U=	.256	3.2	V=	.219	.7	W=	.000180	6.8	T=	.055	8.8
LAT=-12.0	U=	.250	3.1	V=	.176	.6	W=	.000195	5.0	T=	.066	9.3
LAT= -6.0	U=	.242	3.0	V=	.120	12.0	W=	.000371	4.5	T=	.071	9.8
LAT= 0.0	U=	.233	3.1	V=	.065	10.5	W=	.000591	4.7	T=	.062	10.2
LAT= 6.0	U=	.229	3.1	V=	.090	7.7	W=	.000805	5.2	T=	.042	10.6
LAT= 12.0	U=	.236	3.0	V=	.179	6.6	W=	.000974	5.5	T=	.020	11.8
LAT= 18.0	U=	.249	2.9	V=	.264	6.2	W=	.001053	5.8	T=	.020	2.5
LAT= 24.0	U=	.264	2.8	V=	.327	5.9	W=	.001044	6.2	T=	.035	3.6
LAT= 30.0	U=	.265	2.7	V=	.342	5.6	W=	.000936	6.5	T=	.045	4.1
LAT= 36.0	U=	.242	2.6	V=	.304	5.6	W=	.000763	6.8	T=	.044	4.3
LAT= 42.0	U=	.189	2.5	V=	.229	5.5	W=	.000567	7.2	T=	.037	4.5
LAT= 48.0	U=	.125	2.5	V=	.144	5.6	W=	.000396	7.6	T=	.028	4.8
LAT= 54.0	U=	.058	2.9	V=	.061	5.9	W=	.000246	8.0	T=	.018	5.0
LAT= 60.0	U=	.021	5.9	V=	.024	8.6	W=	.000135	8.9	T=	.009	5.3
LAT= 66.0	U=	.045	7.5	V=	.045	10.1	W=	.000146	8.3	T=	.011	4.8
LAT= 72.0	U=	.057	7.4	V=	.054	10.5	W=	.000065	11.0	T=	.003	8.2
LAT= 78.0	U=	.046	7.4	V=	.047	10.7	W=	.000086	.5	T=	.007	9.6

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 25.607 KM

LAT=-78.0	U=	.085	/	11.2	V=	.079	/	8.7	W=	.000137	/	5.0	T=	.014 / 2.2
LAT=-72.0	U=	.122	/	11.4	V=	.118	/	8.8	W=	.000257	/	5.1	T=	.024 / 2.3
LAT=-66.0	U=	.154	/	12.0	V=	.153	/	9.1	W=	.000337	/	5.1	T=	.030 / 2.4
LAT=-60.0	U=	.178	/	.4	V=	.184	/	9.5	W=	.000511	/	5.0	T=	.045 / 2.4
LAT=-54.0	U=	.206	/	.9	V=	.221	/	10.0	W=	.000697	/	5.1	T=	.060 / 2.4
LAT=-48.0	U=	.248	/	1.6	V=	.276	/	10.6	W=	.000827	/	5.2	T=	.069 / 2.5
LAT=-42.0	U=	.301	/	2.1	V=	.344	/	11.1	W=	.000864	/	5.3	T=	.067 / 2.6
LAT=-36.0	U=	.353	/	2.4	V=	.422	/	11.6	W=	.000800	/	5.4	T=	.053 / 2.8
LAT=-30.0	U=	.387	/	2.8	V=	.475	/	12.0	W=	.000640	/	5.7	T=	.030 / 3.7
LAT=-24.0	U=	.389	/	2.9	V=	.471	/	.2	W=	.000488	/	6.4	T=	.022 / 6.3
LAT=-18.0	U=	.363	/	3.0	V=	.392	/	.5	W=	.000461	/	6.9	T=	.039 / 7.5
LAT=-12.0	U=	.327	/	3.1	V=	.260	/	.9	W=	.000548	/	6.7	T=	.039 / 8.0
LAT= -6.0	U=	.290	/	3.2	V=	.104	/	2.2	W=	.000775	/	6.2	T=	.017 / 8.8
LAT= 0.0	U=	.267	/	3.2	V=	.140	/	5.5	W=	.001182	/	5.7	T=	.032 / 1.6
LAT= 6.0	U=	.259	/	3.1	V=	.263	/	6.3	W=	.001614	/	5.6	T=	.084 / 2.0
LAT= 12.0	U=	.252	/	3.2	V=	.327	/	6.6	W=	.001875	/	5.5	T=	.124 / 2.3
LAT= 18.0	U=	.234	/	3.2	V=	.329	/	6.7	W=	.001864	/	5.5	T=	.139 / 2.5
LAT= 24.0	U=	.203	/	3.1	V=	.274	/	6.8	W=	.001588	/	5.7	T=	.129 / 2.7
LAT= 30.0	U=	.162	/	2.8	V=	.194	/	6.5	W=	.001129	/	6.0	T=	.100 / 3.3
LAT= 36.0	U=	.139	/	2.1	V=	.142	/	5.4	W=	.000693	/	6.8	T=	.073 / 4.0
LAT= 42.0	U=	.152	/	1.3	V=	.161	/	4.4	W=	.000503	/	8.1	T=	.058 / 5.1
LAT= 48.0	U=	.183	/	.9	V=	.199	/	4.0	W=	.000522	/	9.2	T=	.054 / 5.9
LAT= 54.0	U=	.210	/	.8	V=	.226	/	3.8	W=	.000523	/	9.8	T=	.047 / 6.5
LAT= 60.0	U=	.213	/	.9	V=	.228	/	3.9	W=	.000456	/	10.3	T=	.037 / 7.0
LAT= 66.0	U=	.203	/	.7	V=	.205	/	3.9	W=	.000346	/	9.6	T=	.030 / 6.3
LAT= 72.0	U=	.168	/	1.2	V=	.164	/	4.0	W=	.000243	/	10.8	T=	.019 / 7.8
LAT= 78.0	U=	.121	/	1.4	V=	.114	/	4.0	W=	.000159	/	12.0	T=	.015 / 9.2

Z= 30.985 KM

LAT=-78.0	U=	.240	/	8.3	V=	.203	/	5.2	W=	.000105	/	.7	T=	.007 / 10.6
LAT=-72.0	U=	.307	/	8.3	V=	.276	/	5.3	W=	.000167	/	1.0	T=	.012 / 10.9
LAT=-66.0	U=	.286	/	8.4	V=	.294	/	5.4	W=	.000216	/	1.4	T=	.016 / 11.0
LAT=-60.0	U=	.233	/	8.4	V=	.248	/	5.3	W=	.000368	/	1.6	T=	.027 / 11.2
LAT=-54.0	U=	.112	/	8.6	V=	.127	/	5.5	W=	.000496	/	1.8	T=	.036 / 11.6
LAT=-48.0	U=	.063	/	2.0	V=	.067	/	11.1	W=	.000637	/	2.1	T=	.049 / 11.8
LAT=-42.0	U=	.230	/	2.4	V=	.280	/	11.3	W=	.000704	/	2.5	T=	.059 / .3
LAT=-36.0	U=	.377	/	2.5	V=	.491	/	11.4	W=	.000749	/	3.3	T=	.070 / 1.0
LAT=-30.0	U=	.455	/	2.6	V=	.624	/	11.6	W=	.000907	/	4.3	T=	.091 / 1.8
LAT=-24.0	U=	.449	/	2.6	V=	.619	/	11.7	W=	.001333	/	5.2	T=	.125 / 2.3
LAT=-18.0	U=	.386	/	2.8	V=	.468	/	12.0	W=	.001946	/	5.7	T=	.168 / 2.8
LAT=-12.0	U=	.317	/	3.1	V=	.253	/	.8	W=	.002496	/	6.0	T=	.210 / 3.0
LAT= -6.0	U=	.252	/	3.2	V=	.192	/	3.6	W=	.002903	/	6.2	T=	.241 / 3.1
LAT= 0.0	U=	.222	/	3.3	V=	.368	/	4.9	W=	.002976	/	6.3	T=	.256 / 3.2
LAT= 6.0	U=	.214	/	3.2	V=	.453	/	5.5	W=	.002705	/	6.2	T=	.252 / 3.0
LAT= 12.0	U=	.198	/	3.4	V=	.414	/	6.1	W=	.002214	/	6.1	T=	.234 / 2.8
LAT= 18.0	U=	.159	/	3.8	V=	.328	/	6.9	W=	.001705	/	5.8	T=	.210 / 2.7
LAT= 24.0	U=	.106	/	4.6	V=	.266	/	8.3	W=	.001298	/	5.2	T=	.181 / 2.5
LAT= 30.0	U=	.070	/	6.4	V=	.238	/	9.5	W=	.001074	/	4.7	T=	.150 / 2.5
LAT= 36.0	U=	.064	/	8.8	V=	.169	/	10.6	W=	.000936	/	4.4	T=	.117 / 2.4
LAT= 42.0	U=	.127	/	11.0	V=	.121	/	1.2	W=	.000777	/	4.3	T=	.087 / 2.4
LAT= 48.0	U=	.244	/	11.9	V=	.251	/	2.8	W=	.000597	/	4.4	T=	.060 / 2.5
LAT= 54.0	U=	.387	/	.4	V=	.419	/	3.4	W=	.000409	/	4.6	T=	.036 / 2.6
LAT= 60.0	U=	.492	/	.7	V=	.525	/	3.7	W=	.000223	/	4.6	T=	.018 / 2.7
LAT= 66.0	U=	.538	/	.7	V=	.544	/	3.8	W=	.000252	/	6.3	T=	.028 / 3.7
LAT= 72.0	U=	.490	/	1.0	V=	.480	/	3.9	W=	.000074	/	4.2	T=	.004 / .2
LAT= 78.0	U=	.359	/	1.2	V=	.354	/	3.9	W=	.000129	/	1.8	T=	.015 / 10.5

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 36.378 KM

LAT=-78.0	U=	.154	3.4	V=	.149	.2	W=	.000438	11.7	T=	.040	8.6
LAT=-72.0	U=	.233	3.3	V=	.224	.3	W=	.000722	11.7	T=	.065	8.6
LAT=-66.0	U=	.305	3.2	V=	.292	.3	W=	.000829	11.8	T=	.072	8.7
LAT=-60.0	U=	.348	3.3	V=	.343	.3	W=	.001230	12.0	T=	.100	8.9
LAT=-54.0	U=	.352	3.3	V=	.362	.3	W=	.001523	.1	T=	.109	9.1
LAT=-48.0	U=	.336	3.3	V=	.343	.2	W=	.001697	.4	T=	.105	9.5
LAT=-42.0	U=	.290	3.3	V=	.289	.1	W=	.001534	.8	T=	.078	10.7
LAT=-36.0	U=	.219	3.3	V=	.206	.1	W=	.001153	1.8	T=	.110	.9
LAT=-30.0	U=	.150	3.3	V=	.111	12.0	W=	.001394	3.9	T=	.240	1.9
LAT=-24.0	U=	.095	3.3	V=	.035	11.0	W=	.002710	5.0	T=	.408	2.3
LAT=-18.0	U=	.064	3.2	V=	.029	7.7	W=	.004288	5.4	T=	.568	2.6
LAT=-12.0	U=	.048	3.2	V=	.046	6.7	W=	.005400	5.7	T=	.679	2.7
LAT= -6.0	U=	.043	3.4	V=	.045	6.1	W=	.005956	6.0	T=	.726	2.9
LAT= 0.0	U=	.038	3.7	V=	.049	5.2	W=	.005597	6.3	T=	.691	3.1
LAT= 6.0	U=	.027	4.3	V=	.070	5.0	W=	.004458	6.5	T=	.587	3.2
LAT= 12.0	U=	.020	5.6	V=	.093	5.3	W=	.002905	6.8	T=	.447	3.3
LAT= 18.0	U=	.025	7.2	V=	.100	5.6	W=	.001425	6.9	T=	.315	3.3
LAT= 24.0	U=	.039	8.1	V=	.086	6.2	W=	.000384	4.5	T=	.217	2.7
LAT= 30.0	U=	.068	8.5	V=	.049	7.9	W=	.001314	3.0	T=	.205	1.8
LAT= 36.0	U=	.115	8.6	V=	.092	10.6	W=	.002131	3.2	T=	.234	1.3
LAT= 42.0	U=	.184	8.8	V=	.191	11.4	W=	.002556	3.4	T=	.246	1.2
LAT= 48.0	U=	.249	8.9	V=	.280	11.7	W=	.002592	3.7	T=	.230	1.1
LAT= 54.0	U=	.302	9.0	V=	.344	11.9	W=	.002266	3.9	T=	.186	1.2
LAT= 60.0	U=	.331	9.1	V=	.362	.1	W=	.001695	4.1	T=	.131	1.3
LAT= 66.0	U=	.369	9.4	V=	.328	.1	W=	.001176	4.4	T=	.089	1.8
LAT= 72.0	U=	.239	9.1	V=	.271	.2	W=	.000773	4.2	T=	.054	1.1
LAT= 78.0	U=	.143	8.9	V=	.218	.4	W=	.000295	3.6	T=	.026	11.7

Z= 41.789 KM

LAT=-78.0	U=	.637	2.7	V=	.565	11.5	W=	.000250	11.9	T=	.026	8.9
LAT=-72.0	U=	.872	2.7	V=	.798	11.6	W=	.000281	.6	T=	.025	9.6
LAT=-66.0	U=	.946	2.7	V=	.934	11.7	W=	.000319	2.3	T=	.029	.3
LAT=-60.0	U=	.925	2.9	V=	.946	11.9	W=	.000511	2.1	T=	.050	.7
LAT=-54.0	U=	.739	3.1	V=	.798	.1	W=	.000723	2.5	T=	.100	1.5
LAT=-48.0	U=	.470	3.6	V=	.507	.6	W=	.001025	2.7	T=	.177	1.7
LAT=-42.0	U=	.267	5.4	V=	.261	2.5	W=	.001312	3.2	T=	.291	2.0
LAT=-36.0	U=	.422	7.5	V=	.539	4.7	W=	.001716	3.9	T=	.444	2.2
LAT=-30.0	U=	.632	8.1	V=	.892	5.2	W=	.002337	4.5	T=	.621	2.4
LAT=-24.0	U=	.709	8.4	V=	1.047	5.6	W=	.003328	5.1	T=	.811	2.5
LAT=-18.0	U=	.652	8.7	V=	.923	5.9	W=	.004608	5.6	T=	.990	2.7
LAT=-12.0	U=	.548	8.9	V=	.626	6.5	W=	.005804	5.9	T=	1.126	2.8
LAT= -6.0	U=	.426	9.1	V=	.342	8.4	W=	.006734	6.1	T=	1.211	3.0
LAT= 0.0	U=	.361	9.2	V=	.509	10.6	W=	.006930	6.3	T=	1.213	3.1
LAT= 6.0	U=	.360	9.1	V=	.676	11.3	W=	.006171	6.4	T=	1.123	3.1
LAT= 12.0	U=	.370	9.1	V=	.637	.1	W=	.004558	6.4	T=	.951	3.1
LAT= 18.0	U=	.346	9.3	V=	.543	.9	W=	.002643	6.1	T=	.743	2.9
LAT= 24.0	U=	.293	9.6	V=	.471	2.1	W=	.001060	4.4	T=	.535	2.5
LAT= 30.0	U=	.224	9.9	V=	.414	3.0	W=	.001823	2.3	T=	.387	2.0
LAT= 36.0	U=	.188	9.1	V=	.199	2.9	W=	.002712	2.0	T=	.315	1.3
LAT= 42.0	U=	.360	7.8	V=	.255	10.8	W=	.002936	2.0	T=	.272	.8
LAT= 48.0	U=	.673	7.5	V=	.700	10.4	W=	.002697	2.1	T=	.227	.5
LAT= 54.0	U=	1.036	7.5	V=	1.147	10.4	W=	.002097	2.3	T=	.168	.3
LAT= 60.0	U=	1.315	7.5	V=	1.421	10.5	W=	.001402	2.5	T=	.107	.3
LAT= 66.0	U=	1.419	7.6	V=	1.460	10.5	W=	.000892	2.8	T=	.058	.7
LAT= 72.0	U=	1.284	7.4	V=	1.282	10.5	W=	.000552	3.1	T=	.041	.1
LAT= 78.0	U=	.932	7.4	V=	.946	10.6	W=	.000235	3.5	T=	.024	11.2

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 47.224 KM											
LAT=-78.0	U=	.344	5.5	V=	.311	2.9	W=	.000477	5.4	T=	.029 / 2.3
LAT=-72.0	U=	.511	5.7	V=	.484	2.9	W=	.001075	5.2	T=	.080 / 2.1
LAT=-66.0	U=	.678	6.2	V=	.654	3.1	W=	.001686	5.1	T=	.143 / 2.1
LAT=-60.0	U=	.818	6.4	V=	.809	3.4	W=	.002238	5.1	T=	.206 / 2.2
LAT=-54.0	U=	.944	6.8	V=	.949	3.6	W=	.002965	5.1	T=	.309 / 2.2
LAT=-48.0	U=	1.058	7.3	V=	1.076	4.2	W=	.003486	5.2	T=	.418 / 2.3
LAT=-42.0	U=	1.188	7.7	V=	1.227	4.7	W=	.003683	5.3	T=	.537 / 2.4
LAT=-36.0	U=	1.325	8.1	V=	1.394	5.2	W=	.003533	5.4	T=	.664 / 2.5
LAT=-30.0	U=	1.427	8.5	V=	1.553	5.6	W=	.003049	5.6	T=	.787 / 2.6
LAT=-24.0	U=	1.453	8.7	V=	1.607	6.1	W=	.002616	6.1	T=	.915 / 2.7
LAT=-18.0	U=	1.385	8.9	V=	1.479	6.4	W=	.002708	6.5	T=	1.054 / 2.9
LAT=-12.0	U=	1.268	9.0	V=	1.159	6.8	W=	.003367	6.6	T=	1.200 / 3.0
LAT= -6.0	U=	1.118	9.1	V=	.676	7.4	W=	.004483	6.4	T=	1.341 / 3.0
LAT= 0.0	U=	1.001	9.1	V=	.289	9.7	W=	.005782	6.2	T=	1.454 / 3.0
LAT= 6.0	U=	.941	9.1	V=	.620	.1	W=	.006578	5.9	T=	1.502 / 2.9
LAT= 12.0	U=	.924	9.1	V=	1.004	.6	W=	.006200	5.7	T=	1.446 / 2.8
LAT= 18.0	U=	.914	9.1	V=	1.207	.7	W=	.004652	5.4	T=	1.280 / 2.7
LAT= 24.0	U=	.903	9.0	V=	1.212	.7	W=	.002266	4.5	T=	1.012 / 2.6
LAT= 30.0	U=	.875	8.9	V=	1.070	.5	W=	.001927	1.4	T=	.692 / 2.5
LAT= 36.0	U=	.865	8.4	V=	.933	11.9	W=	.003862	.4	T=	.390 / 2.2
LAT= 42.0	U=	.940	7.9	V=	.955	11.0	W=	.004918	12.0	T=	.167 / 1.6
LAT= 48.0	U=	1.055	7.5	V=	1.107	10.4	W=	.004975	11.9	T=	.067 / 11.4
LAT= 54.0	U=	1.184	7.1	V=	1.256	10.1	W=	.004102	11.8	T=	.086 / 9.6
LAT= 60.0	U=	1.236	6.9	V=	1.294	9.9	W=	.002869	11.7	T=	.085 / 9.0
LAT= 66.0	U=	1.156	6.9	V=	1.194	9.8	W=	.001947	11.8	T=	.061 / 8.8
LAT= 72.0	U=	1.012	6.6	V=	.977	9.7	W=	.000967	11.5	T=	.045 / 8.8
LAT= 78.0	U=	.741	6.5	V=	.684	9.8	W=	.000160	9.8	T=	.017 / 9.5
Z= 52.691 KM											
LAT=-78.0	U=	.887	7.7	V=	.885	4.7	W=	.000978	5.9	T=	.043 / 3.1
LAT=-72.0	U=	1.329	7.7	V=	1.307	4.6	W=	.001627	5.8	T=	.069 / 3.0
LAT=-66.0	U=	1.721	7.7	V=	1.690	4.7	W=	.002101	5.8	T=	.085 / 3.0
LAT=-60.0	U=	1.950	7.8	V=	1.994	4.7	W=	.003014	6.1	T=	.114 / 3.3
LAT=-54.0	U=	2.110	7.9	V=	2.191	4.8	W=	.004119	6.2	T=	.166 / 3.3
LAT=-48.0	U=	2.119	8.0	V=	2.248	5.0	W=	.004971	6.5	T=	.206 / 3.4
LAT=-42.0	U=	2.060	8.2	V=	2.189	5.2	W=	.005362	6.7	T=	.260 / 3.5
LAT=-36.0	U=	1.974	8.4	V=	2.043	5.4	W=	.005232	7.0	T=	.333 / 3.5
LAT=-30.0	U=	1.906	8.7	V=	1.900	5.8	W=	.004556	7.5	T=	.429 / 3.5
LAT=-24.0	U=	1.893	8.9	V=	1.813	6.2	W=	.003650	8.1	T=	.563 / 3.3
LAT=-18.0	U=	1.892	9.0	V=	1.727	6.5	W=	.002669	8.5	T=	.735 / 3.2
LAT=-12.0	U=	1.848	9.1	V=	1.524	6.6	W=	.001573	8.0	T=	.913 / 3.1
LAT= -6.0	U=	1.751	9.1	V=	1.148	6.6	W=	.002131	5.7	T=	1.092 / 2.9
LAT= 0.0	U=	1.610	9.1	V=	.569	6.2	W=	.004717	5.1	T=	1.240 / 2.8
LAT= 6.0	U=	1.489	9.0	V=	.299	2.1	W=	.006723	5.1	T=	1.330 / 2.7
LAT= 12.0	U=	1.454	9.0	V=	1.023	1.0	W=	.006712	5.0	T=	1.328 / 2.7
LAT= 18.0	U=	1.494	8.9	V=	1.641	.6	W=	.004662	4.9	T=	1.214 / 2.7
LAT= 24.0	U=	1.593	8.8	V=	2.075	.3	W=	.001147	3.4	T=	.991 / 2.7
LAT= 30.0	U=	1.665	8.7	V=	2.206	12.0	W=	.003671	11.7	T=	.692 / 2.8
LAT= 36.0	U=	1.621	8.4	V=	2.042	11.7	W=	.006736	11.4	T=	.390 / 2.9
LAT= 42.0	U=	1.443	8.1	V=	1.681	11.2	W=	.007905	11.3	T=	.160 / 3.4
LAT= 48.0	U=	1.186	7.6	V=	1.292	10.6	W=	.007515	11.2	T=	.058 / 5.9
LAT= 54.0	U=	.943	6.8	V=	.981	9.7	W=	.005818	11.1	T=	.092 / 7.6
LAT= 60.0	U=	.805	5.8	V=	.826	8.9	W=	.003804	11.0	T=	.094 / 7.7
LAT= 66.0	U=	.692	5.3	V=	.761	8.1	W=	.002517	11.5	T=	.075 / 8.5
LAT= 72.0	U=	.713	4.7	V=	.647	7.7	W=	.001276	10.5	T=	.052 / 7.9
LAT= 78.0	U=	.565	4.5	V=	.433	7.5	W=	.000710	8.9	T=	.023 / 7.2

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 58.200 KM												
LAT=-78.0	U=	1.063 /	8.5	V=	1.007 /	5.3	W=	.001235 /	6.5	T=	.041 /	3.9
LAT=-72.0	U=	1.563 /	8.5	V=	1.499 /	5.4	W=	.001791 /	6.7	T=	.055 /	4.3
LAT=-66.0	U=	1.972 /	8.5	V=	1.943 /	5.5	W=	.002143 /	7.0	T=	.062 /	4.9
LAT=-60.0	U=	2.227 /	8.5	V=	2.297 /	5.4	W=	.003550 /	7.2	T=	.112 /	5.0
LAT=-54.0	U=	2.404 /	8.6	V=	2.517 /	5.5	W=	.005251 /	7.4	T=	.186 /	5.0
LAT=-48.0	U=	2.386 /	8.6	V=	2.567 /	5.5	W=	.006996 /	7.6	T=	.264 /	5.0
LAT=-42.0	U=	2.294 /	8.6	V=	2.472 /	5.6	W=	.008354 /	7.8	T=	.345 /	4.9
LAT=-36.0	U=	2.172 /	8.7	V=	2.262 /	5.7	W=	.009232 /	8.0	T=	.428 /	4.8
LAT=-30.0	U=	2.094 /	8.8	V=	2.047 /	5.8	W=	.009098 /	8.4	T=	.494 /	4.4
LAT=-24.0	U=	2.123 /	8.9	V=	1.925 /	6.0	W=	.007705 /	8.7	T=	.558 /	4.1
LAT=-18.0	U=	2.208 /	8.9	V=	1.906 /	6.1	W=	.005010 /	9.0	T=	.655 /	3.5
LAT=-12.0	U=	2.240 /	9.0	V=	1.830 /	6.1	W=	.001482 /	9.0	T=	.803 /	3.0
LAT= -6.0	U=	2.192 /	9.0	V=	1.627 /	5.9	W=	.002839 /	3.8	T=	.987 /	2.7
LAT= 0.0	U=	2.041 /	9.0	V=	1.105 /	5.6	W=	.006624 /	3.9	T=	1.148 /	2.5
LAT= 6.0	U=	1.893 /	8.9	V=	.313 /	4.0	W=	.008421 /	3.9	T=	1.221 /	2.4
LAT= 12.0	U=	1.870 /	8.9	V=	1.020 /	.5	W=	.007198 /	3.9	T=	1.168 /	2.4
LAT= 18.0	U=	1.948 /	8.8	V=	1.997 /	.1	W=	.003832 /	3.6	T=	1.006 /	2.5
LAT= 24.0	U=	2.096 /	8.8	V=	2.739 /	11.9	W=	.002501 /	11.8	T=	.754 /	2.7
LAT= 30.0	U=	2.148 /	8.7	V=	2.936 /	11.9	W=	.006992 /	10.9	T=	.481 /	3.1
LAT= 36.0	U=	1.953 /	8.5	V=	2.578 /	11.6	W=	.009672 /	10.7	T=	.270 /	3.9
LAT= 42.0	U=	1.501 /	8.3	V=	1.854 /	11.4	W=	.009820 /	10.6	T=	.184 /	5.2
LAT= 48.0	U=	.957 /	7.8	V=	1.093 /	10.9	W=	.008359 /	10.5	T=	.169 /	6.3
LAT= 54.0	U=	.493 /	6.4	V=	.504 /	9.5	W=	.005722 /	10.4	T=	.145 /	6.9
LAT= 60.0	U=	.530 /	4.3	V=	.550 /	7.4	W=	.003413 /	10.0	T=	.112 /	6.8
LAT= 66.0	U=	.665 /	3.7	V=	.705 /	6.7	W=	.001866 /	11.5	T=	.075 /	8.7
LAT= 72.0	U=	.749 /	3.3	V=	.675 /	6.3	W=	.001208 /	9.0	T=	.048 /	6.8
LAT= 78.0	U=	.600 /	3.2	V=	.501 /	6.1	W=	.001461 /	8.1	T=	.049 /	5.6
Z= 63.765 KM												
LAT=-78.0	U=	1.196 /	9.4	V=	1.057 /	6.2	W=	.001366 /	7.2	T=	.048 /	4.4
LAT=-72.0	U=	1.726 /	9.4	V=	1.614 /	6.3	W=	.002101 /	7.6	T=	.065 /	5.1
LAT=-66.0	U=	2.113 /	9.4	V=	2.117 /	6.4	W=	.002823 /	8.1	T=	.093 /	6.1
LAT=-60.0	U=	2.436 /	9.5	V=	2.528 /	6.5	W=	.004836 /	8.1	T=	.172 /	5.7
LAT=-54.0	U=	2.667 /	9.5	V=	2.794 /	6.5	W=	.007398 /	8.2	T=	.297 /	5.6
LAT=-48.0	U=	2.661 /	9.5	V=	2.862 /	6.5	W=	.010260 /	8.4	T=	.447 /	5.5
LAT=-42.0	U=	2.558 /	9.4	V=	2.753 /	6.5	W=	.012821 /	8.5	T=	.599 /	5.4
LAT=-36.0	U=	2.406 /	9.3	V=	2.499 /	6.3	W=	.014745 /	8.6	T=	.742 /	5.2
LAT=-30.0	U=	2.314 /	9.1	V=	2.264 /	6.0	W=	.015047 /	8.7	T=	.822 /	4.9
LAT=-24.0	U=	2.364 /	8.9	V=	2.202 /	5.6	W=	.012988 /	8.7	T=	.826 /	4.6
LAT=-18.0	U=	2.492 /	8.8	V=	2.312 /	5.3	W=	.008387 /	8.6	T=	.817 /	3.9
LAT=-12.0	U=	2.558 /	8.8	V=	2.326 /	5.2	W=	.002604 /	7.9	T=	.893 /	3.2
LAT= -6.0	U=	2.530 /	8.8	V=	2.116 /	5.2	W=	.004988 /	3.6	T=	1.076 /	2.5
LAT= 0.0	U=	2.382 /	8.8	V=	1.428 /	5.2	W=	.010314 /	3.4	T=	1.247 /	2.2
LAT= 6.0	U=	2.237 /	8.8	V=	.249 /	4.6	W=	.012287 /	3.1	T=	1.282 /	2.0
LAT= 12.0	U=	2.232 /	8.7	V=	1.238 /	11.6	W=	.010274 /	2.8	T=	1.139 /	2.0
LAT= 18.0	U=	2.321 /	8.7	V=	2.467 /	11.6	W=	.006465 /	1.9	T=	.884 /	2.2
LAT= 24.0	U=	2.452 /	8.7	V=	3.311 /	11.6	W=	.006004 /	11.6	T=	.582 /	2.7
LAT= 30.0	U=	2.418 /	8.7	V=	3.415 /	11.7	W=	.009833 /	10.5	T=	.402 /	3.9
LAT= 36.0	U=	2.057 /	8.8	V=	2.819 /	11.7	W=	.011966 /	10.0	T=	.397 /	5.0
LAT= 42.0	U=	1.410 /	8.9	V=	1.830 /	11.8	W=	.011452 /	9.6	T=	.411 /	5.5
LAT= 48.0	U=	.700 /	9.2	V=	.871 /	.2	W=	.009402 /	9.3	T=	.371 /	5.7
LAT= 54.0	U=	.302 /	12.0	V=	.347 /	2.8	W=	.006432 /	8.8	T=	.275 /	5.7
LAT= 60.0	U=	.645 /	1.5	V=	.658 /	4.4	W=	.004616 /	8.3	T=	.212 /	5.4
LAT= 66.0	U=	.795 /	1.8	V=	.799 /	4.6	W=	.000745 /	.2	T=	.068 /	8.8
LAT= 72.0	U=	.787 /	1.6	V=	.721 /	4.6	W=	.002100 /	7.4	T=	.087 /	5.0
LAT= 78.0	U=	.607 /	1.5	V=	.529 /	4.5	W=	.002778 /	7.4	T=	.122 /	4.7

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 69.403 KM												
LAT=-78.0	U=	1.854	10.4	V=	1.627	7.5	W=	.001409	7.9	T=	.050	4.8
LAT=-72.0	U=	2.646	10.5	V=	2.491	7.5	W=	.002720	8.5	T=	.088	6.0
LAT=-66.0	U=	3.172	10.6	V=	3.236	7.6	W=	.004423	9.0	T=	.162	6.8
LAT=-60.0	U=	3.668	10.6	V=	3.807	7.6	W=	.006959	8.9	T=	.275	6.3
LAT=-54.0	U=	3.941	10.6	V=	4.123	7.6	W=	.010439	8.9	T=	.478	6.0
LAT=-48.0	U=	3.853	10.5	V=	4.097	7.5	W=	.014269	8.9	T=	.737	5.8
LAT=-42.0	U=	3.555	10.4	V=	3.736	7.4	W=	.017663	8.9	T=	1.001	5.7
LAT=-36.0	U=	3.145	10.1	V=	3.167	6.9	W=	.020251	8.9	T=	1.247	5.5
LAT=-30.0	U=	2.858	9.6	V=	2.781	6.2	W=	.020875	8.8	T=	1.386	5.2
LAT=-24.0	U=	2.858	9.1	V=	2.977	5.4	W=	.018643	8.5	T=	1.373	4.8
LAT=-18.0	U=	3.004	8.8	V=	3.438	4.9	W=	.013283	8.2	T=	1.268	4.1
LAT=-12.0	U=	3.065	8.6	V=	3.517	4.6	W=	.006506	7.2	T=	1.228	3.3
LAT= -6.0	U=	2.980	8.6	V=	2.985	4.5	W=	.006440	4.0	T=	1.341	2.5
LAT= 0.0	U=	2.783	8.6	V=	1.677	4.3	W=	.013461	3.0	T=	1.495	1.9
LAT= 6.0	U=	2.638	8.5	V=	.358	.6	W=	.017656	2.5	T=	1.485	1.4
LAT= 12.0	U=	2.653	8.4	V=	2.087	11.1	W=	.017216	2.0	T=	1.243	1.3
LAT= 18.0	U=	2.709	8.4	V=	3.356	11.1	W=	.013220	1.4	T=	.864	1.5
LAT= 24.0	U=	2.737	8.4	V=	3.915	11.1	W=	.009166	11.8	T=	.472	2.4
LAT= 30.0	U=	2.530	8.6	V=	3.572	11.3	W=	.010573	10.0	T=	.529	4.3
LAT= 36.0	U=	2.076	9.0	V=	2.678	11.6	W=	.014143	9.0	T=	.775	4.9
LAT= 42.0	U=	1.727	9.8	V=	1.929	.5	W=	.015263	8.5	T=	.881	4.9
LAT= 48.0	U=	1.800	10.7	V=	1.928	1.6	W=	.013939	8.1	T=	.829	4.9
LAT= 54.0	U=	2.190	11.2	V=	2.373	2.2	W=	.010381	7.8	T=	.655	4.9
LAT= 60.0	U=	2.595	11.4	V=	2.675	2.4	W=	.007956	7.5	T=	.541	4.7
LAT= 66.0	U=	2.356	11.4	V=	2.731	2.3	W=	.001705	2.3	T=	.033	7.8
LAT= 72.0	U=	2.486	11.2	V=	2.372	2.2	W=	.003299	6.8	T=	.242	4.5
LAT= 78.0	U=	1.969	11.2	V=	1.625	2.2	W=	.004724	7.2	T=	.301	4.5
Z= 75.140 KM												
LAT=-78.0	U=	3.275	11.4	V=	3.042	8.6	W=	.000919	8.7	T=	.025	4.3
LAT=-72.0	U=	4.716	11.5	V=	4.563	8.6	W=	.002513	9.6	T=	.093	7.4
LAT=-66.0	U=	5.779	11.7	V=	5.871	8.6	W=	.005056	9.8	T=	.248	7.7
LAT=-60.0	U=	6.635	11.6	V=	6.850	8.6	W=	.007053	9.6	T=	.347	7.0
LAT=-54.0	U=	7.071	11.5	V=	7.353	8.5	W=	.010564	9.4	T=	.632	6.5
LAT=-48.0	U=	6.906	11.3	V=	7.239	8.3	W=	.014436	9.2	T=	1.028	6.1
LAT=-42.0	U=	6.340	11.0	V=	6.515	8.0	W=	.018302	9.0	T=	1.471	5.8
LAT=-36.0	U=	5.491	10.7	V=	5.469	7.4	W=	.022011	8.7	T=	1.945	5.5
LAT=-30.0	U=	4.733	10.1	V=	4.754	6.5	W=	.024714	8.4	T=	2.310	5.1
LAT=-24.0	U=	4.303	9.3	V=	5.001	5.5	W=	.024890	8.1	T=	2.441	4.8
LAT=-18.0	U=	4.125	8.8	V=	5.605	4.6	W=	.020778	7.8	T=	2.281	4.3
LAT=-12.0	U=	3.967	8.4	V=	5.654	4.1	W=	.012635	7.3	T=	1.950	3.6
LAT= -6.0	U=	3.665	8.2	V=	4.757	3.5	W=	.005259	4.5	T=	1.712	2.5
LAT= 0.0	U=	3.367	8.2	V=	3.006	2.7	W=	.015066	2.4	T=	1.785	1.4
LAT= 6.0	U=	3.236	8.1	V=	2.017	.4	W=	.024100	1.9	T=	1.900	.7
LAT= 12.0	U=	3.258	7.9	V=	3.432	10.8	W=	.025659	1.6	T=	1.700	.3
LAT= 18.0	U=	3.225	7.8	V=	4.717	10.3	W=	.020224	1.3	T=	1.194	.3
LAT= 24.0	U=	3.041	7.8	V=	4.978	10.0	W=	.009667	.3	T=	.554	1.6
LAT= 30.0	U=	2.564	8.2	V=	3.948	10.1	W=	.007447	9.0	T=	.802	4.0
LAT= 36.0	U=	2.304	9.2	V=	2.423	11.0	W=	.014556	7.9	T=	1.323	4.3
LAT= 42.0	U=	3.317	10.2	V=	3.057	.9	W=	.016675	7.5	T=	1.538	4.4
LAT= 48.0	U=	4.925	10.6	V=	5.156	1.6	W=	.014439	7.2	T=	1.462	4.4
LAT= 54.0	U=	6.590	10.8	V=	7.117	1.8	W=	.009249	6.8	T=	1.169	4.3
LAT= 60.0	U=	7.810	10.8	V=	8.025	1.8	W=	.006537	6.6	T=	1.014	4.3
LAT= 66.0	U=	6.912	10.8	V=	8.002	1.7	W=	.008887	1.9	T=	.136	11.0
LAT= 72.0	U=	7.201	10.7	V=	6.740	1.7	W=	.002603	6.0	T=	.495	4.3
LAT= 78.0	U=	5.659	10.7	V=	4.418	1.6	W=	.007337	7.2	T=	.712	4.4

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 81.010 KM

LAT=-78.0	U=	4.177	/ .5	V=	4.190	/ 9.7	W=	.000573	/ 5.7	T=	.124	/ 2.0
LAT=-72.0	U=	6.281	/ .5	V=	6.223	/ 9.5	W=	.001084	/ 7.6	T=	.095	/ 2.4
LAT=-66.0	U=	8.265	/ .4	V=	8.202	/ 9.3	W=	.003215	/ 8.3	T=	.131	/ 5.1
LAT=-60.0	U=	9.678	/ .2	V=	9.951	/ 9.2	W=	.004865	/ 7.5	T=	.312	/ 4.0
LAT=-54.0	U=	10.937	/ 11.8	V=	11.333	/ 8.9	W=	.008551	/ 7.2	T=	.711	/ 4.3
LAT=-48.0	U=	11.676	/ 11.5	V=	12.229	/ 8.5	W=	.012817	/ 7.0	T=	1.239	/ 4.4
LAT=-42.0	U=	11.694	/ 11.2	V=	12.321	/ 8.1	W=	.017207	/ 7.0	T=	1.906	/ 4.5
LAT=-36.0	U=	11.079	/ 10.8	V=	11.682	/ 7.5	W=	.021269	/ 7.0	T=	2.673	/ 4.4
LAT=-30.0	U=	9.649	/ 10.3	V=	10.129	/ 6.9	W=	.023437	/ 7.0	T=	3.320	/ 4.4
LAT=-24.0	U=	7.753	/ 9.7	V=	8.331	/ 5.8	W=	.022534	/ 7.1	T=	3.601	/ 4.3
LAT=-18.0	U=	6.045	/ 9.0	V=	7.909	/ 4.4	W=	.017899	/ 7.4	T=	3.311	/ 4.1
LAT=-12.0	U=	5.152	/ 8.4	V=	9.045	/ 3.4	W=	.010739	/ 8.0	T=	2.586	/ 3.8
LAT= -6.0	U=	4.529	/ 8.0	V=	9.654	/ 2.6	W=	.005790	/ 10.5	T=	1.644	/ 3.0
LAT= 0.0	U=	4.210	/ 7.8	V=	8.037	/ 2.0	W=	.012663	/ .4	T=	1.429	/ 1.3
LAT= 6.0	U=	4.147	/ 7.6	V=	4.706	/ .8	W=	.019083	/ .8	T=	1.872	/ .3
LAT= 12.0	U=	4.320	/ 7.4	V=	4.627	/ 10.2	W=	.020086	/ 1.1	T=	2.048	/ 12.0
LAT= 18.0	U=	4.424	/ 7.1	V=	7.584	/ 9.3	W=	.017006	/ 1.5	T=	1.870	/ .2
LAT= 24.0	U=	4.351	/ 6.9	V=	8.839	/ 8.9	W=	.011603	/ 2.2	T=	1.515	/ .9
LAT= 30.0	U=	3.544	/ 7.3	V=	6.840	/ 9.0	W=	.011058	/ 3.6	T=	1.435	/ 1.9
LAT= 36.0	U=	3.378	/ 8.8	V=	3.320	/ 10.4	W=	.014219	/ 4.0	T=	1.563	/ 2.5
LAT= 42.0	U=	6.196	/ 10.0	V=	5.835	/ .9	W=	.015934	/ 3.9	T=	1.583	/ 2.8
LAT= 48.0	U=	9.605	/ 10.3	V=	10.302	/ 1.3	W=	.015903	/ 3.5	T=	1.403	/ 2.9
LAT= 54.0	U=	12.507	/ 10.4	V=	13.496	/ 1.4	W=	.014743	/ 3.0	T=	1.075	/ 3.0
LAT= 60.0	U=	14.185	/ 10.4	V=	14.253	/ 1.4	W=	.009400	/ 2.8	T=	1.077	/ 3.7
LAT= 66.0	U=	10.995	/ 10.3	V=	13.435	/ 1.3	W=	.023359	/ 1.6	T=	.994	/ 10.9
LAT= 72.0	U=	12.110	/ 10.3	V=	10.719	/ 1.2	W=	.002041	/ 2.2	T=	.654	/ 4.1
LAT= 78.0	U=	9.757	/ 10.3	V=	6.297	/ 1.1	W=	.009865	/ 7.5	T=	1.332	/ 4.4

Z= 87.062 KM

LAT=-78.0	U=	8.316	/ 9.3	V=	7.286	/ 6.5	W=	.002516	/ 6.3	T=	.278	/ 2.9
LAT=-72.0	U=	11.838	/ 9.5	V=	11.282	/ 6.5	W=	.006789	/ 6.9	T=	.602	/ 3.9
LAT=-66.0	U=	14.281	/ 9.7	V=	14.718	/ 6.6	W=	.012376	/ 7.0	T=	1.055	/ 4.2
LAT=-60.0	U=	16.927	/ 9.8	V=	17.469	/ 6.8	W=	.016789	/ 6.5	T=	1.563	/ 3.5
LAT=-54.0	U=	18.812	/ 10.0	V=	19.367	/ 7.0	W=	.024908	/ 6.1	T=	2.607	/ 3.2
LAT=-48.0	U=	19.461	/ 10.2	V=	20.192	/ 7.2	W=	.033443	/ 5.7	T=	3.689	/ 3.0
LAT=-42.0	U=	18.862	/ 10.3	V=	19.318	/ 7.4	W=	.041007	/ 5.2	T=	4.642	/ 2.7
LAT=-36.0	U=	17.009	/ 10.5	V=	16.714	/ 7.6	W=	.047883	/ 4.8	T=	5.378	/ 2.5
LAT=-30.0	U=	13.783	/ 10.5	V=	11.845	/ 7.6	W=	.049375	/ 4.3	T=	5.398	/ 2.4
LAT=-24.0	U=	10.001	/ 10.2	V=	5.346	/ 7.0	W=	.042167	/ 3.9	T=	4.556	/ 2.3
LAT=-18.0	U=	7.015	/ 9.5	V=	4.772	/ 3.7	W=	.025503	/ 3.2	T=	3.022	/ 2.4
LAT=-12.0	U=	5.771	/ 8.7	V=	10.048	/ 2.9	W=	.011894	/ .6	T=	1.704	/ 3.4
LAT= -6.0	U=	5.359	/ 8.2	V=	13.237	/ 2.7	W=	.028785	/ 10.4	T=	1.837	/ 5.2
LAT= 0.0	U=	4.966	/ 8.0	V=	11.760	/ 2.6	W=	.045193	/ 9.9	T=	2.589	/ 5.6
LAT= 6.0	U=	4.870	/ 7.8	V=	6.292	/ 2.1	W=	.046298	/ 9.5	T=	2.462	/ 5.2
LAT= 12.0	U=	5.549	/ 7.4	V=	3.464	/ 10.8	W=	.030003	/ 8.9	T=	1.887	/ 3.7
LAT= 18.0	U=	6.648	/ 7.1	V=	8.244	/ 9.6	W=	.009811	/ 6.6	T=	2.796	/ 1.9
LAT= 24.0	U=	7.777	/ 7.0	V=	11.107	/ 9.4	W=	.034037	/ 3.6	T=	4.802	/ 1.0
LAT= 30.0	U=	7.792	/ 7.1	V=	10.081	/ 9.4	W=	.061875	/ 3.2	T=	6.340	/ .6
LAT= 36.0	U=	6.721	/ 7.5	V=	7.013	/ 9.9	W=	.077512	/ 2.7	T=	6.756	/ .1
LAT= 42.0	U=	6.542	/ 8.4	V=	6.133	/ 11.3	W=	.079359	/ 2.4	T=	6.111	/ 11.8
LAT= 48.0	U=	8.073	/ 9.0	V=	8.484	/ .1	W=	.071734	/ 2.1	T=	4.970	/ 11.5
LAT= 54.0	U=	10.230	/ 9.2	V=	11.017	/ .3	W=	.057481	/ 1.6	T=	3.508	/ 11.0
LAT= 60.0	U=	12.512	/ 9.3	V=	12.170	/ .1	W=	.036851	/ 1.1	T=	1.521	/ 10.6
LAT= 66.0	U=	9.028	/ 8.2	V=	12.457	/ 11.9	W=	.044192	/ .9	T=	3.576	/ 10.3
LAT= 72.0	U=	12.575	/ 9.1	V=	10.616	/ 11.6	W=	.013195	/ 11.7	T=	.359	/ 6.6
LAT= 78.0	U=	11.049	/ 9.3	V=	6.724	/ 10.8	W=	.012443	/ 8.1	T=	1.958	/ 4.5

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 93.363 KM

LAT=-78.0	U=	21.933	10.2	V=	21.314	7.4	W=	.004262	3.3	T=	.415 / .8
LAT=-72.0	U=	31.203	10.1	V=	30.320	7.2	W=	.011064	4.4	T=	.915 / 1.9
LAT=-66.0	U=	37.184	10.0	V=	37.303	7.0	W=	.021030	4.6	T=	1.663 / 2.2
LAT=-60.0	U=	39.131	9.9	V=	40.930	6.9	W=	.032507	4.1	T=	2.638 / 1.6
LAT=-54.0	U=	38.199	9.6	V=	40.429	6.6	W=	.052652	3.9	T=	4.340 / 1.5
LAT=-48.0	U=	33.323	9.3	V=	35.857	6.4	W=	.076323	3.7	T=	6.206 / 1.3
LAT=-42.0	U=	27.006	9.0	V=	28.230	6.0	W=	.097692	3.4	T=	7.894 / 1.1
LAT=-36.0	U=	19.634	8.7	V=	19.032	5.3	W=	.114399	3.2	T=	9.155 / .9
LAT=-30.0	U=	12.829	8.5	V=	9.958	4.3	W=	.116289	3.0	T=	9.146 / .8
LAT=-24.0	U=	7.896	8.7	V=	4.385	1.8	W=	.098004	2.6	T=	7.457 / .7
LAT=-18.0	U=	6.107	9.4	V=	7.082	11.1	W=	.060592	2.2	T=	4.223 / .8
LAT=-12.0	U=	6.109	9.8	V=	9.700	10.2	W=	.022197	.6	T=	1.630 / 2.9
LAT= -6.0	U=	6.421	9.7	V=	9.018	9.3	W=	.044311	9.4	T=	4.528 / 5.0
LAT= 0.0	U=	5.949	9.5	V=	5.105	7.5	W=	.078637	8.7	T=	7.314 / 5.0
LAT= 6.0	U=	5.434	9.5	V=	8.294	4.3	W=	.087248	8.3	T=	7.905 / 4.8
LAT= 12.0	U=	6.010	9.6	V=	16.154	3.2	W=	.065300	7.9	T=	6.228 / 4.0
LAT= 18.0	U=	7.481	9.4	V=	19.780	2.7	W=	.028165	6.9	T=	4.618 / 2.6
LAT= 24.0	U=	10.044	8.9	V=	19.065	1.8	W=	.038888	3.0	T=	6.280 / .7
LAT= 30.0	U=	14.655	8.0	V=	16.003	.5	W=	.085681	2.2	T=	9.451 / 11.9
LAT= 36.0	U=	22.418	7.2	V=	21.156	10.8	W=	.113709	1.8	T=	11.159 / 11.5
LAT= 42.0	U=	32.031	6.7	V=	32.511	9.7	W=	.117644	1.5	T=	10.762 / 11.0
LAT= 48.0	U=	40.526	6.3	V=	42.994	9.3	W=	.106492	1.2	T=	9.321 / 10.7
LAT= 54.0	U=	46.379	6.0	V=	48.842	9.0	W=	.082543	.9	T=	6.821 / 10.4
LAT= 60.0	U=	45.677	5.8	V=	48.989	8.8	W=	.053745	.4	T=	3.634 / 9.8
LAT= 66.0	U=	51.877	5.4	V=	42.740	8.5	W=	.042220	.1	T=	4.764 / 9.9
LAT= 72.0	U=	29.156	5.6	V=	33.273	8.4	W=	.023228	11.5	T=	1.308 / 8.3
LAT= 78.0	U=	14.766	5.8	V=	26.385	8.1	W=	.009248	10.0	T=	1.756 / 5.1

Z= 96.638 KM

LAT=-78.0	U=	31.424	8.3	V=	27.761	5.3	W=	.014008	1.8	T=	1.487 / 10.8
LAT=-72.0	U=	45.834	8.2	V=	42.558	5.2	W=	.025783	2.5	T=	2.547 / 11.5
LAT=-66.0	U=	56.283	8.2	V=	55.051	5.1	W=	.037830	2.9	T=	3.544 / 11.9
LAT=-60.0	U=	63.747	8.1	V=	63.795	5.1	W=	.060909	2.5	T=	6.116 / 11.7
LAT=-54.0	U=	65.287	8.0	V=	66.828	5.1	W=	.089828	2.4	T=	9.014 / 11.8
LAT=-48.0	U=	59.084	7.9	V=	62.143	5.0	W=	.121954	2.3	T=	12.226 / 11.7
LAT=-42.0	U=	47.947	7.9	V=	49.988	4.9	W=	.147214	2.2	T=	14.620 / 11.7
LAT=-36.0	U=	33.019	7.9	V=	31.090	4.8	W=	.161613	2.1	T=	15.744 / 11.7
LAT=-30.0	U=	18.195	8.0	V=	9.301	4.9	W=	.153288	2.2	T=	14.430 / 11.8
LAT=-24.0	U=	7.903	8.6	V=	9.906	10.5	W=	.118575	2.1	T=	10.618 / 12.0
LAT=-18.0	U=	6.121	10.3	V=	20.644	10.4	W=	.063473	2.4	T=	5.614 / .7
LAT=-12.0	U=	7.830	10.8	V=	21.534	10.2	W=	.015320	4.7	T=	4.407 / 3.0
LAT= -6.0	U=	8.809	10.4	V=	13.594	9.6	W=	.056936	7.4	T=	7.835 / 4.2
LAT= 0.0	U=	8.400	10.0	V=	7.251	6.7	W=	.088232	7.7	T=	9.917 / 4.4
LAT= 6.0	U=	6.959	9.7	V=	16.422	4.7	W=	.087145	7.8	T=	9.055 / 4.3
LAT= 12.0	U=	6.205	9.4	V=	22.801	3.8	W=	.055690	8.1	T=	5.945 / 3.9
LAT= 18.0	U=	7.801	9.1	V=	23.809	3.0	W=	.016699	9.7	T=	3.204 / 2.3
LAT= 24.0	U=	11.923	8.9	V=	24.022	1.8	W=	.046676	1.1	T=	5.264 / .1
LAT= 30.0	U=	18.061	8.4	V=	26.047	.5	W=	.093916	1.4	T=	7.613 / 11.6
LAT= 36.0	U=	23.912	7.7	V=	28.474	11.2	W=	.097709	1.3	T=	7.918 / 11.2
LAT= 42.0	U=	28.911	7.0	V=	32.096	10.1	W=	.089626	1.0	T=	6.400 / 10.9
LAT= 48.0	U=	33.916	6.2	V=	37.368	9.3	W=	.073374	.7	T=	4.423 / 10.6
LAT= 54.0	U=	39.469	5.5	V=	42.788	8.5	W=	.053400	.1	T=	2.233 / 10.1
LAT= 60.0	U=	40.557	5.0	V=	44.411	8.1	W=	.037964	11.2	T=	.717 / 7.4
LAT= 66.0	U=	44.884	4.7	V=	38.646	7.7	W=	.029468	10.2	T=	1.156 / 9.7
LAT= 72.0	U=	28.495	4.5	V=	31.111	7.6	W=	.020630	10.9	T=	.717 / 5.9
LAT= 78.0	U=	16.049	4.3	V=	24.528	7.4	W=	.008278	11.4	T=	1.370 / 4.8

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 100.017 KM

LAT=-78.0	U=	36.260	/ 6.6	V=	31.680	/ 3.5	W=	.020305	/ .7	T=	1.979	/ 9.9
LAT=-72.0	U=	52.341	/ 6.6	V=	48.283	/ 3.5	W=	.031013	/ 1.3	T=	2.853	/ 10.5
LAT=-66.0	U=	63.275	/ 6.6	V=	61.849	/ 3.5	W=	.041330	/ 1.7	T=	3.594	/ 11.1
LAT=-60.0	U=	73.087	/ 6.6	V=	71.501	/ 3.5	W=	.070394	/ 1.2	T=	6.759	/ 10.6
LAT=-54.0	U=	74.505	/ 6.6	V=	74.986	/ 3.6	W=	.104997	/ 1.1	T=	10.178	/ 10.7
LAT=-48.0	U=	67.973	/ 6.7	V=	70.201	/ 3.8	W=	.146600	/ 1.0	T=	13.998	/ 10.5
LAT=-42.0	U=	56.058	/ 6.9	V=	57.808	/ 4.0	W=	.181251	/ .9	T=	16.857	/ 10.5
LAT=-36.0	U=	40.902	/ 7.3	V=	39.471	/ 4.4	W=	.203189	/ 1.0	T=	18.146	/ 10.6
LAT=-30.0	U=	27.033	/ 7.9	V=	24.062	/ 5.6	W=	.196471	/ 1.0	T=	16.180	/ 10.8
LAT=-24.0	U=	20.229	/ 8.9	V=	26.144	/ 7.5	W=	.153519	/ 1.2	T=	11.304	/ 11.3
LAT=-18.0	U=	19.155	/ 9.8	V=	33.742	/ 8.3	W=	.085384	/ 1.8	T=	7.503	/ .9
LAT=-12.0	U=	18.449	/ 10.2	V=	32.532	/ 8.6	W=	.051273	/ 4.1	T=	10.446	/ 2.5
LAT= -6.0	U=	15.668	/ 10.1	V=	20.212	/ 9.0	W=	.099928	/ 5.7	T=	15.554	/ 3.2
LAT= 0.0	U=	12.471	/ 9.7	V=	3.788	/ .3	W=	.129797	/ 6.2	T=	17.109	/ 3.3
LAT= 6.0	U=	10.693	/ 9.2	V=	22.216	/ 2.6	W=	.109309	/ 6.7	T=	14.180	/ 3.4
LAT= 12.0	U=	10.038	/ 8.9	V=	34.408	/ 2.6	W=	.053342	/ 7.6	T=	8.244	/ 3.1
LAT= 18.0	U=	10.442	/ 8.5	V=	34.061	/ 2.4	W=	.046936	/ 10.8	T=	3.658	/ 1.4
LAT= 24.0	U=	12.651	/ 7.9	V=	22.555	/ 1.9	W=	.102147	/ 11.9	T=	6.355	/ 11.1
LAT= 30.0	U=	18.876	/ 7.3	V=	15.806	/ 11.6	W=	.127694	/ .3	T=	9.055	/ 10.8
LAT= 36.0	U=	27.911	/ 6.8	V=	29.527	/ 10.1	W=	.113373	/ .5	T=	8.723	/ 10.9
LAT= 42.0	U=	35.149	/ 6.4	V=	39.782	/ 9.5	W=	.075857	/ .7	T=	6.330	/ 10.8
LAT= 48.0	U=	37.672	/ 6.0	V=	42.399	/ 9.1	W=	.038098	/ .7	T=	3.663	/ 10.8
LAT= 54.0	U=	35.935	/ 5.6	V=	38.493	/ 8.6	W=	.007762	/ 11.4	T=	1.136	/ 10.5
LAT= 60.0	U=	30.017	/ 5.1	V=	33.170	/ 8.0	W=	.016748	/ 8.3	T=	1.002	/ 4.6
LAT= 66.0	U=	31.547	/ 4.4	V=	25.381	/ 7.4	W=	.031385	/ 8.1	T=	.430	/ 9.5
LAT= 72.0	U=	17.661	/ 3.8	V=	20.656	/ 7.0	W=	.008114	/ 9.4	T=	.804	/ 4.8
LAT= 78.0	U=	8.905	/ 3.2	V=	17.838	/ 6.8	W=	.009495	/ .9	T=	1.283	/ 4.4

Z= 103.521 KM

LAT=-78.0	U=	39.311	/ 5.0	V=	32.802	/ 2.2	W=	.021716	/ 11.2	T=	3.096	/ 8.3
LAT=-72.0	U=	55.866	/ 5.0	V=	50.280	/ 2.1	W=	.028282	/ 11.8	T=	3.325	/ 8.8
LAT=-66.0	U=	66.425	/ 5.1	V=	64.667	/ 2.1	W=	.034546	/ .5	T=	3.055	/ 9.8
LAT=-60.0	U=	78.869	/ 5.1	V=	75.445	/ 2.1	W=	.066881	/ 11.9	T=	6.697	/ 9.2
LAT=-54.0	U=	79.916	/ 5.1	V=	79.633	/ 2.2	W=	.102258	/ 11.8	T=	10.0[illegible]	/ 9.2
LAT=-48.0	U=	72.792	/ 5.2	V=	74.819	/ 2.3	W=	.148128	/ 11.7	T=	14.917	/ 9.1
LAT=-42.0	U=	59.527	/ 5.5	V=	60.554	/ 2.5	W=	.188364	/ 11.7	T=	18.561	/ 9.1
LAT=-36.0	U=	42.619	/ 6.0	V=	40.270	/ 3.2	W=	.216537	/ 11.7	T=	20.179	/ 9.2
LAT=-30.0	U=	29.883	/ 7.1	V=	28.432	/ 4.9	W=	.216251	/ 11.9	T=	18.209	/ 9.4
LAT=-24.0	U=	29.452	/ 8.4	V=	42.114	/ 6.4	W=	.177716	/ .2	T=	12.236	/ 10.0
LAT=-18.0	U=	33.719	/ 9.1	V=	57.135	/ 7.0	W=	.116038	/ 1.0	T=	8.201	/ 12.0
LAT=-12.0	U=	34.553	/ 9.5	V=	58.159	/ 7.3	W=	.094689	/ 2.8	T=	14.337	/ 1.6
LAT= -6.0	U=	29.863	/ 9.6	V=	42.787	/ 7.6	W=	.143488	/ 4.2	T=	22.345	/ 2.2
LAT= 0.0	U=	22.737	/ 9.5	V=	15.072	/ 8.7	W=	.174425	/ 4.7	T=	25.415	/ 2.5
LAT= 6.0	U=	17.443	/ 9.3	V=	24.548	/ .8	W=	.144721	/ 5.2	T=	21.841	/ 2.7
LAT= 12.0	U=	15.941	/ 9.0	V=	47.792	/ 1.3	W=	.065644	/ 6.3	T=	13.278	/ 2.9
LAT= 18.0	U=	14.705	/ 8.7	V=	53.445	/ 1.5	W=	.071067	/ 9.7	T=	4.011	/ 3.4
LAT= 24.0	U=	13.234	/ 8.2	V=	39.764	/ 1.6	W=	.155432	/ 10.7	T=	4.838	/ 8.9
LAT= 30.0	U=	13.918	/ 6.8	V=	10.446	/ 1.4	W=	.193711	/ 11.1	T=	9.488	/ 9.4
LAT= 36.0	U=	25.732	/ 5.8	V=	22.7[illegible]	/ 8.5	W=	.169483	/ 11.5	T=	9.567	/ 9.7
LAT= 42.0	U=	39.304	/ 5.6	V=	45.472	/ 8.6	W=	.110205	/ .1	T=	7.029	/ 10.3
LAT= 48.0	U=	46.518	/ 5.6	V=	54.869	/ 8.7	W=	.059248	/ 1.1	T=	4.425	/ 11.0
LAT= 54.0	U=	45.920	/ 5.8	V=	51.029	/ 8.8	W=	.036667	/ 3.2	T=	2.347	/ .4
LAT= 60.0	U=	35.808	/ 6.1	V=	39.604	/ 9.0	W=	.039724	/ 4.7	T=	1.932	/ 2.7
LAT= 66.0	U=	28.042	/ 6.0	V=	24.049	/ 9.4	W=	.041622	/ 6.2	T=	.599	/ 1.5
LAT= 72.0	U=	12.468	/ 7.0	V=	13.382	/ 9.6	W=	.018313	/ 4.8	T=	.868	/ 3.4
LAT= 78.0	U=	7.661	/ 8.3	V=	8.448	/ 8.9	W=	.018359	/ 2.0	T=	.785	/ 4.1

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 107.177 KM

LAT=-78.0	U=	33.750 /	3.6	V=	26.831 /	1.1	W=	.022150 /	9.3	T=	4.352 /	6.7
LAT=-72.0	U=	47.528 /	3.7	V=	41.705 /	.9	W=	.024618 /	9.9	T=	5.164 /	7.4
LAT=-66.0	U=	55.999 /	3.8	V=	54.062 /	.8	W=	.026297 /	11.1	T=	5.242 /	8.5
LAT=-60.0	U=	68.235 /	3.7	V=	63.541 /	.8	W=	.060585 /	10.4	T=	9.584 /	7.8
LAT=-54.0	U=	67.216 /	3.8	V=	66.817 /	.8	W=	.093915 /	10.4	T=	12.780 /	7.7
LAT=-48.0	U=	60.467 /	4.0	V=	61.203 /	1.0	W=	.138149 /	10.3	T=	17.970 /	7.6
LAT=-42.0	U=	47.771 /	4.3	V=	47.154 /	1.3	W=	.177289 /	10.3	T=	21.986 /	7.6
LAT=-36.0	U=	32.852 /	5.1	V=	28.688 /	2.2	W=	.205086 /	10.4	T=	23.849 /	7.6
LAT=-30.0	U=	27.672 /	6.6	V=	30.590 /	4.4	W=	.204922 /	10.6	T=	21.438 /	7.8
LAT=-24.0	U=	37.663 /	7.8	V=	55.494 /	5.4	W=	.169813 /	11.0	T=	14.078 /	8.3
LAT=-18.0	U=	47.239 /	8.4	V=	75.407 /	5.9	W=	.124868 /	.2	T=	7.903 /	10.6
LAT=-12.0	U=	50.842 /	8.7	V=	79.449 /	6.2	W=	.137683 /	1.7	T=	16.591 /	.4
LAT= -6.0	U=	46.665 /	8.9	V=	64.500 /	6.5	W=	.202565 /	2.7	T=	27.649 /	.9
LAT= 0.0	U=	37.500 /	9.1	V=	33.480 /	7.3	W=	.241158 /	3.2	T=	32.943 /	1.1
LAT= 6.0	U=	28.228 /	9.0	V=	27.276 /	10.6	W=	.207966 /	3.5	T=	29.777 /	1.4
LAT= 12.0	U=	23.603 /	8.8	V=	58.879 /	11.8	W=	.103337 /	4.0	T=	19.491 /	1.9
LAT= 18.0	U=	20.673 /	8.7	V=	74.406 /	.3	W=	.043109 /	8.2	T=	8.364 /	3.1
LAT= 24.0	U=	17.670 /	8.5	V=	68.048 /	.7	W=	.166662 /	9.5	T=	9.443 /	6.5
LAT= 30.0	U=	7.815 /	7.9	V=	39.591 /	1.4	W=	.243004 /	10.0	T=	15.647 /	7.5
LAT= 36.0	U=	14.678 /	4.0	V=	19.510 /	4.4	W=	.237623 /	10.3	T=	16.272 /	8.1
LAT= 42.0	U=	37.387 /	4.0	V=	45.172 /	6.5	W=	.176189 /	10.9	T=	13.008 /	8.7
LAT= 48.0	U=	54.656 /	4.3	V=	66.524 /	7.1	W=	.113311 /	11.7	T=	9.294 /	9.6
LAT= 54.0	U=	64.655 /	4.6	V=	75.035 /	7.7	W=	.071512 /	1.2	T=	6.476 /	10.9
LAT= 60.0	U=	62.113 /	5.0	V=	71.006 /	8.1	W=	.066472 /	2.7	T=	4.912 /	.4
LAT= 66.0	U=	60.138 /	5.4	V=	55.612 /	8.5	W=	.038201 /	4.4	T=	3.523 /	.6
LAT= 72.0	U=	39.427 /	5.9	V=	41.297 /	8.8	W=	.042595 /	3.5	T=	2.796 /	1.1
LAT= 78.0	U=	24.755 /	6.3	V=	30.218 /	8.9	W=	.034169 /	2.5	T=	1.261 /	1.5

Z= 111.019 KM

LAT=-78.0	U=	25.398 /	2.0	V=	17.998 /	12.0	W=	.022906 /	7.4	T=	3.894 /	4.5
LAT=-72.0	U=	35.735 /	2.1	V=	29.266 /	11.5	W=	.024368 /	8.1	T=	4.064 /	5.7
LAT=-66.0	U=	40.645 /	2.3	V=	38.543 /	11.4	W=	.025136 /	9.4	T=	6.220 /	7.4
LAT=-60.0	U=	50.192 /	2.2	V=	45.177 /	11.3	W=	.060551 /	8.9	T=	11.300 /	6.5
LAT=-54.0	U=	46.427 /	2.3	V=	46.271 /	11.3	W=	.086984 /	9.0	T=	14.667 /	6.5
LAT=-48.0	U=	39.246 /	2.4	V=	39.134 /	11.3	W=	.126286 /	9.0	T=	20.052 /	6.2
LAT=-42.0	U=	26.381 /	2.7	V=	23.707 /	11.6	W=	.160052 /	9.0	T=	24.192 /	6.1
LAT=-36.0	U=	14.059 /	4.4	V=	8.820 /	2.4	W=	.181408 /	9.1	T=	25.796 /	6.2
LAT=-30.0	U=	23.477 /	6.6	V=	34.075 /	4.4	W=	.175332 /	9.3	T=	22.807 /	6.3
LAT=-24.0	U=	41.355 /	7.3	V=	64.064 /	4.7	W=	.138197 /	10.0	T=	14.178 /	6.8
LAT=-18.0	U=	55.162 /	7.5	V=	85.850 /	4.9	W=	.116587 /	11.6	T=	9.131 /	9.5
LAT=-12.0	U=	61.040 /	7.7	V=	91.159 /	5.1	W=	.178219 /	.9	T=	22.169 /	10.9
LAT= -6.0	U=	59.075 /	8.0	V=	78.234 /	5.3	W=	.273296 /	1.5	T=	37.150 /	11.3
LAT= 0.0	U=	50.725 /	8.1	V=	47.718 /	6.0	W=	.332952 /	1.8	T=	45.636 /	11.5
LAT= 6.0	U=	40.177 /	8.2	V=	28.192 /	8.6	W=	.312498 /	2.1	T=	43.691 /	11.8
LAT= 12.0	U=	32.891 /	8.1	V=	59.225 /	10.3	W=	.205174 /	2.3	T=	31.647 /	.1
LAT= 18.0	U=	28.674 /	7.9	V=	82.395 /	10.9	W=	.057915 /	2.8	T=	16.352 /	.9
LAT= 24.0	U=	26.494 /	7.8	V=	86.642 /	11.5	W=	.115538 /	8.3	T=	10.724 /	4.0
LAT= 30.0	U=	18.935 /	7.9	V=	66.673 /	.1	W=	.237717 /	8.6	T=	20.389 /	5.6
LAT= 36.0	U=	2.458 /	9.5	V=	38.578 /	1.5	W=	.273825 /	9.0	T=	24.471 /	6.2
LAT= 42.0	U=	20.960 /	2.2	V=	36.812 /	3.9	W=	.233200 /	9.4	T=	22.016 /	6.8
LAT= 48.0	U=	40.983 /	2.7	V=	55.597 /	5.3	W=	.167755 /	10.0	T=	17.652 /	7.6
LAT= 54.0	U=	57.484 /	3.2	V=	71.324 /	6.1	W=	.105794 /	11.2	T=	13.478 /	8.7
LAT= 60.0	U=	62.121 /	3.7	V=	76.148 /	6.7	W=	.078685 /	.8	T=	9.719 /	9.8
LAT= 66.0	U=	70.961 /	4.2	V=	66.824 /	7.3	W=	.022167 /	.9	T=	7.156 /	9.9
LAT= 72.0	U=	50.946 /	4.7	V=	53.552 /	7.7	W=	.046904 /	2.1	T=	5.975 /	10.9
LAT= 78.0	U=	33.757 /	5.0	V=	42.248 /	7.9	W=	.045695 /	2.2	T=	4.199 /	11.6

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 115.091 KM

LAT=-78.0	U=	19.414 /	.4	V=	12.567 /	10.3	W=	.023100 /	5.7	T=	3.946 /	2.6
LAT=-72.0	U=	27.056 /	.5	V=	21.259 /	9.9	W=	.024799 /	6.6	T=	3.888 /	3.8
LAT=-66.0	U=	29.882 /	.8	V=	28.064 /	9.8	W=	.031855 /	8.1	T=	6.574 /	5.7
LAT=-60.0	U=	37.132 /	.7	V=	32.568 /	9.7	W=	.067280 /	7.7	T=	12.351 /	5.1
LAT=-54.0	U=	31.826 /	.6	V=	32.122 /	9.5	W=	.085202 /	7.8	T=	14.932 /	5.0
LAT=-48.0	U=	25.147 /	.5	V=	25.289 /	9.3	W=	.118508 /	7.7	T=	20.382 /	4.8
LAT=-42.0	U=	12.959 /	.3	V=	12.390 /	8.5	W=	.144733 /	7.7	T=	24.187 /	4.6
LAT=-36.0	U=	4.965 /	6.9	V=	14.727 /	4.9	W=	.156255 /	7.7	T=	24.984 /	4.6
LAT=-30.0	U=	23.762 /	6.6	V=	39.809 /	4.1	W=	.136469 /	8.0	T=	20.481 /	4.7
LAT=-24.0	U=	41.532 /	6.6	V=	66.288 /	4.0	W=	.088033 /	8.9	T=	9.834 /	5.3
LAT=-18.0	U=	54.975 /	6.7	V=	86.296 /	4.0	W=	.106355 /	11.3	T=	11.259 /	9.2
LAT=-12.0	U=	61.723 /	6.8	V=	92.125 /	4.0	W=	.213932 /	.2	T=	30.362 /	9.8
LAT= -6.0	U=	61.902 /	7.0	V=	82.198 /	4.2	W=	.339408 /	.6	T=	49.581 /	10.0
LAT= 0.0	U=	56.210 /	7.1	V=	56.180 /	4.7	W=	.423078 /	.7	T=	61.781 /	10.2
LAT= 6.0	U=	47.269 /	7.2	V=	32.225 /	6.6	W=	.423373 /	1.0	T=	62.411 /	10.3
LAT= 12.0	U=	39.265 /	7.2	V=	51.800 /	8.7	W=	.326106 /	1.2	T=	50.245 /	10.6
LAT= 18.0	U=	34.034 /	7.0	V=	77.063 /	9.5	W=	.171174 /	1.4	T=	31.143 /	11.0
LAT= 24.0	U=	31.729 /	6.8	V=	89.380 /	10.0	W=	.036354 /	5.8	T=	13.506 /	.9
LAT= 30.0	U=	27.424 /	6.9	V=	79.439 /	10.6	W=	.194635 /	7.3	T=	19.952 /	3.5
LAT= 36.0	U=	16.094 /	7.2	V=	55.226 /	11.5	W=	.278878 /	7.7	T=	28.989 /	4.5
LAT= 42.0	U=	2.001 /	11.9	V=	34.471 /	1.1	W=	.271345 /	8.2	T=	29.887 /	5.0
LAT= 48.0	U=	19.532 /	1.6	V=	35.232 /	3.1	W=	.222687 /	8.7	T=	26.468 /	5.7
LAT= 54.0	U=	36.875 /	2.1	V=	48.534 /	4.6	W=	.152800 /	9.5	T=	21.690 /	6.6
LAT= 60.0	U=	44.992 /	2.6	V=	58.751 /	5.5	W=	.088702 /	10.9	T=	14.528 /	7.5
LAT= 66.0	U=	62.519 /	3.2	V=	58.240 /	6.1	W=	.059371 /	10.0	T=	13.413 /	7.4
LAT= 72.0	U=	47.048 /	3.7	V=	50.614 /	6.6	W=	.044120 /	.3	T=	8.365 /	8.8
LAT= 78.0	U=	32.164 /	4.0	V=	42.649 /	7.0	W=	.046214 /	1.5	T=	6.451 /	10.2

Z= 119.451 KM

LAT=-78.0	U=	15.748 /	10.9	V=	11.152 /	8.7	W=	.023197 /	4.3	T=	3.704 /	1.3
LAT=-72.0	U=	21.751 /	11.0	V=	18.067 /	8.4	W=	.023695 /	5.4	T=	4.266 /	2.7
LAT=-66.0	U=	24.581 /	11.3	V=	23.168 /	8.3	W=	.038511 /	7.2	T=	8.026 /	4.2
LAT=-60.0	U=	30.341 /	11.2	V=	26.537 /	8.0	W=	.074831 /	6.7	T=	14.150 /	3.7
LAT=-54.0	U=	24.643 /	10.9	V=	26.085 /	7.8	W=	.087608 /	6.7	T=	15.769 /	3.7
LAT=-48.0	U=	19.806 /	10.6	V=	21.982 /	7.2	W=	.117958 /	6.6	T=	20.740 /	3.4
LAT=-42.0	U=	12.169 /	9.7	V=	17.891 /	5.9	W=	.128645 /	6.4	T=	23.697 /	3.3
LAT=-36.0	U=	12.319 /	7.3	V=	25.578 /	4.3	W=	.141398 /	6.3	T=	23.303 /	3.2
LAT=-30.0	U=	25.039 /	6.3	V=	43.907 /	3.5	W=	.106759 /	6.4	T=	17.550 /	2.9
LAT=-24.0	U=	39.192 /	6.0	V=	64.889 /	3.2	W=	.030560 /	7.4	T=	4.925 /	2.5
LAT=-18.0	U=	50.770 /	6.0	V=	81.274 /	3.1	W=	.104551 /	11.6	T=	14.505 /	9.2
LAT=-12.0	U=	57.784 /	6.0	V=	86.370 /	3.1	W=	.247553 /	11.8	T=	35.977 /	9.0
LAT= -6.0	U=	59.686 /	6.1	V=	78.411 /	3.3	W=	.394395 /	11.9	T=	57.448 /	9.0
LAT= 0.0	U=	56.450 /	6.2	V=	57.202 /	3.8	W=	.498990 /	12.0	T=	72.412 /	9.1
LAT= 6.0	U=	49.721 /	6.3	V=	35.421 /	5.2	W=	.521466 /	.1	T=	75.675 /	9.3
LAT= 12.0	U=	42.649 /	6.2	V=	45.276 /	7.4	W=	.436869 /	.3	T=	65.299 /	9.5
LAT= 18.0	U=	37.524 /	6.1	V=	69.084 /	8.3	W=	.283967 /	.6	T=	46.473 /	9.9
LAT= 24.0	U=	35.088 /	5.9	V=	84.447 /	8.8	W=	.084411 /	1.6	T=	24.097 /	10.9
LAT= 30.0	U=	32.533 /	5.8	V=	81.714 /	9.3	W=	.142300 /	6.1	T=	18.567 /	1.4
LAT= 36.0	U=	25.048 /	6.0	V=	64.774 /	10.0	W=	.267396 /	6.7	T=	29.134 /	2.8
LAT= 42.0	U=	12.471 /	6.1	V=	40.433 /	11.0	W=	.297572 /	7.1	T=	33.139 /	3.6
LAT= 48.0	U=	4.852 /	2.5	V=	25.998 /	.7	W=	.275289 /	7.6	T=	32.660 /	4.2
LAT= 54.0	U=	20.244 /	1.6	V=	26.456 /	2.8	W=	.215389 /	8.3	T=	28.688 /	5.0
LAT= 60.0	U=	27.606 /	1.9	V=	37.368 /	4.4	W=	.120343 /	9.4	T=	18.582 /	5.7
LAT= 66.0	U=	49.745 /	2.5	V=	43.620 /	5.2	W=	.123810 /	8.9	T=	21.322 /	5.7
LAT= 72.0	U=	38.994 /	3.0	V=	41.378 /	5.7	W=	.059390 /	10.7	T=	11.085 /	7.0
LAT= 78.0	U=	26.474 /	3.2	V=	36.456 /	6.1	W=	.051649 /	.7	T=	7.530 /	8.9

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 124.175 KM

LAT=-78.0	U=	13.395 /	9.7	V=	11.063 /	7.7	W=	.022532 /	3.1	T=	3.139 /	.6
LAT=-72.0	U=	18.370 /	9.8	V=	16.275 /	7.2	W=	.022715 /	4.4	T=	4.808 /	2.1
LAT=-66.0	U=	21.147 /	10.1	V=	20.583 /	6.9	W=	.042498 /	6.2	T=	9.686 /	3.1
LAT=-60.0	U=	25.922 /	9.9	V=	23.385 /	6.7	W=	.081059 /	5.8	T=	15.911 /	2.8
LAT=-54.0	U=	21.047 /	9.5	V=	23.756 /	6.2	W=	.094131 /	5.7	T=	17.373 /	2.6
LAT=-48.0	U=	18.213 /	9.0	V=	22.715 /	5.5	W=	.127724 /	5.3	T=	22.222 /	2.3
LAT=-42.0	U=	14.915 /	8.0	V=	23.999 /	4.4	W=	.149162 /	5.1	T=	24.853 /	2.1
LAT=-36.0	U=	17.379 /	6.5	V=	31.984 /	3.4	W=	.149236 /	5.0	T=	23.961 /	1.9
LAT=-30.0	U=	26.584 /	5.7	V=	46.385 /	2.8	W=	.112247 /	4.6	T=	18.993 /	1.4
LAT=-24.0	U=	37.437 /	5.4	V=	62.424 /	2.5	W=	.049010 /	2.8	T=	10.427 /	.1
LAT=-18.0	U=	47.130 /	5.3	V=	74.787 /	2.3	W=	.129862 /	11.9	T=	16.565 /	9.3
LAT=-12.0	U=	53.905 /	5.3	V=	78.257 /	2.2	W=	.281184 /	11.5	T=	36.067 /	8.6
LAT= -6.0	U=	56.957 /	5.3	V=	71.011 /	2.4	W=	.440851 /	11.4	T=	56.873 /	8.5
LAT= 0.0	U=	55.782 /	5.4	V=	53.182 /	2.9	W=	.562478 /	11.4	T=	72.717 /	8.4
LAT= 6.0	U=	51.224 /	5.5	V=	35.117 /	4.2	W=	.603132 /	11.4	T=	78.251 /	8.5
LAT= 12.0	U=	45.523 /	5.4	V=	41.029 /	6.2	W=	.535862 /	11.6	T=	70.968 /	8.7
LAT= 18.0	U=	41.024 /	5.2	V=	63.085 /	7.2	W=	.387054 /	11.9	T=	54.583 /	9.0
LAT= 24.0	U=	38.686 /	5.0	V=	79.692 /	7.7	W=	.177663 /	.6	T=	32.985 /	9.8
LAT= 30.0	U=	36.931 /	5.0	V=	81.482 /	8.3	W=	.106856 /	4.3	T=	20.787 /	11.8
LAT= 36.0	U=	31.820 /	5.1	V=	69.033 /	8.9	W=	.250019 /	5.7	T=	28.255 /	1.5
LAT= 42.0	U=	22.769 /	5.2	V=	48.945 /	9.5	W=	.315380 /	6.3	T=	33.194 /	2.4
LAT= 48.0	U=	11.586 /	4.7	V=	29.367 /	10.4	W=	.324450 /	6.8	T=	35.356 /	3.1
LAT= 54.0	U=	10.286 /	2.0	V=	14.261 /	.4	W=	.289515 /	7.5	T=	33.425 /	3.8
LAT= 60.0	U=	14.136 /	1.6	V=	18.643 /	3.4	W=	.183641 /	8.3	T=	22.776 /	4.3
LAT= 66.0	U=	37.449 /	2.0	V=	29.262 /	4.6	W=	.212602 /	8.3	T=	28.225 /	4.7
LAT= 72.0	U=	30.541 /	2.4	V=	31.313 /	5.1	W=	.099204 /	9.6	T=	13.598 /	5.8
LAT= 78.0	U=	20.770 /	2.6	V=	29.438 /	5.3	W=	.066323 /	11.9	T=	8.155 /	7.9

Z= 129.367 KM

LAT=-78.0	U=	11.791 /	8.4	V=	10.000 /	6.6	W=	.020864 /	2.1	T=	2.891 /	.5
LAT=-72.0	U=	16.233 /	8.5	V=	14.815 /	5.9	W=	.022738 /	3.6	T=	5.824 /	1.6
LAT=-66.0	U=	18.581 /	8.8	V=	19.004 /	5.6	W=	.047321 /	5.2	T=	11.341 /	2.3
LAT=-60.0	U=	22.956 /	8.6	V=	22.165 /	5.3	W=	.090695 /	4.8	T=	17.796 /	2.0
LAT=-54.0	U=	20.066 /	8.1	V=	23.979 /	4.9	W=	.107179 /	4.6	T=	19.722 /	1.8
LAT=-48.0	U=	19.390 /	7.5	V=	25.635 /	4.2	W=	.147708 /	4.3	T=	24.685 /	1.5
LAT=-42.0	U=	19.152 /	6.8	V=	29.208 /	3.4	W=	.173705 /	4.1	T=	27.352 /	1.2
LAT=-36.0	U=	22.062 /	5.8	V=	36.659 /	2.6	W=	.176937 /	3.8	T=	26.958 /	.9
LAT=-30.0	U=	28.814 /	5.2	V=	47.996 /	2.1	W=	.151134 /	3.2	T=	23.358 /	.5
LAT=-24.0	U=	37.105 /	4.8	V=	59.985 /	1.8	W=	.115770 /	1.9	T=	16.722 /	11.5
LAT=-18.0	U=	45.075 /	4.8	V=	68.781 /	1.6	W=	.172254 /	12.0	T=	17.283 /	9.5
LAT=-12.0	U=	51.313 /	4.7	V=	70.263 /	1.5	W=	.313426 /	11.2	T=	31.536 /	8.4
LAT= -6.0	U=	54.972 /	4.7	V=	62.883 /	1.6	W=	.478516 /	10.9	T=	50.126 /	8.0
LAT= 0.0	U=	55.257 /	4.8	V=	46.986 /	2.1	W=	.613754 /	10.8	T=	65.521 /	7.9
LAT= 6.0	U=	52.456 /	4.8	V=	31.210 /	3.4	W=	.672030 /	10.8	T=	72.693 /	7.9
LAT= 12.0	U=	48.109 /	4.8	V=	37.566 /	5.4	W=	.622703 /	11.0	T=	68.588 /	8.0
LAT= 18.0	U=	44.299 /	4.6	V=	57.986 /	6.3	W=	.483790 /	11.3	T=	55.434 /	8.4
LAT= 24.0	U=	42.223 /	4.4	V=	74.715 /	6.9	W=	.276087 /	11.9	T=	36.974 /	9.1
LAT= 30.0	U=	40.764 /	4.4	V=	79.469 /	7.4	W=	.130083 /	2.3	T=	23.606 /	10.7
LAT= 36.0	U=	36.903 /	4.4	V=	72.494 /	7.9	W=	.234785 /	4.6	T=	26.875 /	.5
LAT= 42.0	U=	30.220 /	4.6	V=	56.454 /	8.4	W=	.326327 /	5.4	T=	33.136 /	1.4
LAT= 48.0	U=	19.869 /	4.4	V=	38.436 /	9.0	W=	.361728 /	6.1	T=	35.592 /	2.2
LAT= 54.0	U=	10.042 /	3.1	V=	18.933 /	9.9	W=	.363033 /	6.8	T=	35.878 /	3.0
LAT= 60.0	U=	6.693 /	2.3	V=	4.744 /	1.3	W=	.263388 /	7.5	T=	26.269 /	3.3
LAT= 66.0	U=	27.619 /	1.5	V=	16.149 /	4.0	W=	.319498 /	7.7	T=	32.859 /	4.0
LAT= 72.0	U=	22.987 /	2.0	V=	21.685 /	4.4	W=	.149783 /	8.9	T=	15.507 /	4.9
LAT= 78.0	U=	15.763 /	2.2	V=	22.446 /	4.4	W=	.087169 /	11.2	T=	7.910 /	7.1

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 135.169 KM

LAT=-78.0	U=	11.473 /	7.2	V=	8.940 /	5.2	W=	.015275 /	1.4	T=	3.012 /	.6
LAT=-72.0	U=	16.057 /	7.3	V=	14.452 /	4.6	W=	.023287 /	3.3	T=	7.049 /	1.2
LAT=-66.0	U=	18.447 /	7.5	V=	19.273 /	4.4	W=	.057905 /	4.4	T=	13.259 /	1.5
LAT=-60.0	U=	23.136 /	7.4	V=	23.611 /	4.0	W=	.105938 /	4.0	T=	19.805 /	1.3
LAT=-54.0	U=	22.871 /	6.7	V=	26.979 /	3.6	W=	.126443 /	3.8	T=	22.192 /	1.1
LAT=-48.0	U=	23.938 /	6.3	V=	30.201 /	3.1	W=	.173754 /	3.4	T=	26.999 /	.9
LAT=-42.0	U=	24.913 /	5.8	V=	34.097 /	2.5	W=	.206089 /	3.2	T=	29.732 /	.7
LAT=-36.0	U=	27.214 /	5.3	V=	40.776 /	1.9	W=	.213082 /	3.0	T=	29.634 /	.4
LAT=-30.0	U=	31.906 /	4.8	V=	49.211 /	1.4	W=	.199621 /	2.3	T=	26.613 /	11.9
LAT=-24.0	U=	37.763 /	4.5	V=	57.868 /	1.1	W=	.176336 /	1.3	T=	20.621 /	11.2
LAT=-18.0	U=	43.998 /	4.4	V=	63.688 /	.9	W=	.217722 /	11.8	T=	16.156 /	9.6
LAT=-12.0	U=	49.465 /	4.3	V=	63.373 /	.8	W=	.342559 /	10.9	T=	25.151 /	8.1
LAT= -6.0	U=	53.274 /	4.3	V=	55.682 /	.9	W=	.507204 /	10.4	T=	40.860 /	7.5
LAT= 0.0	U=	54.560 /	4.3	V=	40.922 /	1.3	W=	.651303 /	10.3	T=	55.359 /	7.3
LAT= 6.0	U=	53.200 /	4.3	V=	26.437 /	2.7	W=	.727851 /	10.3	T=	63.543 /	7.3
LAT= 12.0	U=	49.871 /	4.2	V=	33.847 /	4.6	W=	.697592 /	10.5	T=	61.845 /	7.5
LAT= 18.0	U=	46.760 /	4.1	V=	52.190 /	5.6	W=	.569834 /	10.7	T=	52.051 /	7.8
LAT= 24.0	U=	45.041 /	4.0	V=	69.748 /	6.2	W=	.369354 /	11.4	T=	36.454 /	8.5
LAT= 30.0	U=	43.606 /	3.9	V=	76.851 /	6.7	W=	.193249 /	1.0	T=	24.159 /	9.9
LAT= 36.0	U=	40.245 /	4.0	V=	73.453 /	7.2	W=	.232625 /	3.4	T=	25.355 /	11.7
LAT= 42.0	U=	35.331 /	4.1	V=	61.575 /	7.6	W=	.327832 /	4.5	T=	31.390 /	.8
LAT= 48.0	U=	25.636 /	4.1	V=	46.668 /	8.1	W=	.385038 /	5.4	T=	35.041 /	1.6
LAT= 54.0	U=	13.175 /	3.6	V=	29.246 /	8.8	W=	.417383 /	6.2	T=	36.788 /	2.3
LAT= 60.0	U=	6.828 /	4.0	V=	10.768 /	9.4	W=	.339714 /	6.9	T=	28.221 /	2.7
LAT= 66.0	U=	20.375 /	1.2	V=	5.358 /	3.0	W=	.426934 /	7.4	T=	35.137 /	3.5
LAT= 72.0	U=	17.607 /	1.7	V=	13.971 /	3.5	W=	.205398 /	8.4	T=	16.361 /	4.4
LAT= 78.0	U=	11.714 /	1.9	V=	17.981 /	3.4	W=	.101816 /	10.7	T=	7.388 /	6.6

Z= 141.772 KM

LAT=-78.0	U=	12.939 /	6.2	V=	10.715 /	3.8	W=	.005504 /	11.9	T=	2.862 /	.5
LAT=-72.0	U=	18.353 /	6.2	V=	17.135 /	3.4	W=	.023219 /	3.3	T=	7.435 /	.8
LAT=-66.0	U=	21.900 /	6.4	V=	22.628 /	3.3	W=	.072916 /	3.7	T=	14.408 /	.9
LAT=-60.0	U=	26.832 /	6.3	V=	27.426 /	3.1	W=	.124951 /	3.3	T=	20.928 /	.8
LAT=-54.0	U=	28.333 /	5.8	V=	31.476 /	2.7	W=	.148680 /	3.0	T=	23.692 /	.7
LAT=-48.0	U=	30.232 /	5.5	V=	34.972 /	2.3	W=	.204050 /	2.7	T=	28.081 /	.4
LAT=-42.0	U=	31.300 /	5.2	V=	38.704 /	1.8	W=	.239836 /	2.4	T=	30.522 /	.2
LAT=-36.0	U=	32.217 /	4.9	V=	43.420 /	1.3	W=	.249371 /	2.1	T=	30.290 /	12.0
LAT=-30.0	U=	35.109 /	4.5	V=	49.610 /	.8	W=	.246008 /	1.6	T=	27.498 /	11.6
LAT=-24.0	U=	38.861 /	4.2	V=	55.658 /	.5	W=	.231729 /	.7	T=	20.679 /	11.0
LAT=-18.0	U=	43.162 /	4.1	V=	59.345 /	.3	W=	.259855 /	11.4	T=	14.030 /	9.7
LAT=-12.0	U=	47.860 /	4.0	V=	57.775 /	.2	W=	.373891 /	10.5	T=	18.773 /	7.8
LAT= -6.0	U=	51.519 /	3.9	V=	49.947 /	.3	W=	.532233 /	10.1	T=	32.368 /	7.0
LAT= 0.0	U=	53.099 /	3.8	V=	36.105 /	.6	W=	.682007 /	9.8	T=	45.886 /	6.8
LAT= 6.0	U=	52.638 /	3.9	V=	22.418 /	2.0	W=	.771189 /	9.8	T=	54.096 /	6.8
LAT= 12.0	U=	50.187 /	3.7	V=	28.854 /	4.1	W=	.760077 /	10.0	T=	54.256 /	7.0
LAT= 18.0	U=	48.134 /	3.6	V=	46.744 /	5.0	W=	.651160 /	10.3	T=	46.609 /	7.2
LAT= 24.0	U=	46.753 /	3.6	V=	63.767 /	5.5	W=	.458524 /	10.9	T=	33.556 /	7.9
LAT= 30.0	U=	45.113 /	3.5	V=	72.513 /	6.0	W=	.277499 /	.2	T=	22.429 /	9.3
LAT= 36.0	U=	42.031 /	3.6	V=	72.482 /	6.5	W=	.255852 /	2.3	T=	23.576 /	11.1
LAT= 42.0	U=	38.418 /	3.7	V=	64.022 /	7.0	W=	.329012 /	3.7	T=	29.317 /	.2
LAT= 48.0	U=	29.483 /	3.6	V=	52.097 /	7.5	W=	.395789 /	4.7	T=	33.824 /	1.0
LAT= 54.0	U=	16.731 /	3.4	V=	36.168 /	8.1	W=	.446911 /	5.6	T=	36.940 /	1.8
LAT= 60.0	U=	10.206 /	4.4	V=	18.856 /	8.6	W=	.400028 /	6.4	T=	29.533 /	2.1
LAT= 66.0	U=	15.025 /	.8	V=	2.362 /	10.0	W=	.523366 /	7.0	T=	35.872 /	3.0
LAT= 72.0	U=	13.392 /	1.6	V=	9.428 /	2.3	W=	.255863 /	7.9	T=	16.158 /	3.8
LAT= 78.0	U=	8.571 /	1.8	V=	16.641 /	2.2	W=	.110889 /	10.1	T=	6.860 /	6.2

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 149.425 KM

LAT=-78.0	U=	15.177 /	5.5	V=	14.810 /	3.0	W=	.009107 /	7.5	T=	1.860 /	11.8
LAT=-72.0	U=	21.420 /	5.6	V=	21.512 /	2.7	W=	.025690 /	3.9	T=	6.190 /	.1
LAT=-66.0	U=	26.385 /	5.7	V=	27.610 /	2.5	W=	.083776 /	3.3	T=	13.634 /	.3
LAT=-60.0	U=	31.931 /	5.6	V=	32.429 /	2.3	W=	.138953 /	2.8	T=	20.132 /	.2
LAT=-54.0	U=	33.486 /	5.2	V=	35.944 /	2.0	W=	.165829 /	2.4	T=	22.774 /	.1
LAT=-48.0	U=	35.699 /	5.0	V=	38.998 /	1.7	W=	.230102 /	2.0	T=	26.215 /	11.9
LAT=-42.0	U=	36.435 /	4.8	V=	41.596 /	1.2	W=	.271251 /	1.7	T=	28.314 /	11.7
LAT=-36.0	U=	35.971 /	4.5	V=	45.063 /	.7	W=	.282486 /	1.4	T=	28.295 /	11.5
LAT=-30.0	U=	37.399 /	4.2	V=	49.173 /	.3	W=	.290155 /	.9	T=	24.906 /	11.2
LAT=-24.0	U=	39.263 /	4.0	V=	53.249 /	12.0	W=	.283159 /	.1	T=	18.524 /	10.6
LAT=-18.0	U=	41.901 /	3.8	V=	55.257 /	11.7	W=	.306533 /	11.0	T=	10.662 /	9.3
LAT=-12.0	U=	45.734 /	3.7	V=	53.035 /	11.6	W=	.405544 /	10.2	T=	14.867 /	7.2
LAT= -6.0	U=	49.027 /	3.6	V=	45.499 /	11.6	W=	.555928 /	9.6	T=	26.846 /	6.4
LAT= 0.0	U=	50.720 /	3.5	V=	32.766 /	11.9	W=	.710050 /	9.4	T=	39.083 /	6.2
LAT= 6.0	U=	50.735 /	3.4	V=	20.002 /	1.2	W=	.814329 /	9.4	T=	47.251 /	6.2
LAT= 12.0	U=	49.401 /	3.4	V=	24.973 /	3.4	W=	.820109 /	9.6	T=	48.079 /	6.4
LAT= 18.0	U=	47.845 /	3.3	V=	41.181 /	4.4	W=	.723097 /	9.9	T=	41.693 /	6.7
LAT= 24.0	U=	46.794 /	3.2	V=	57.492 /	4.9	W=	.546776 /	10.4	T=	30.010 /	7.3
LAT= 30.0	U=	45.049 /	3.1	V=	66.781 /	5.3	W=	.364976 /	11.5	T=	19.399 /	8.7
LAT= 36.0	U=	42.114 /	3.2	V=	68.427 /	5.9	W=	.291493 /	1.3	T=	20.116 /	10.7
LAT= 42.0	U=	39.521 /	3.3	V=	62.888 /	6.4	W=	.354701 /	2.7	T=	26.768 /	11.7
LAT= 48.0	U=	31.278 /	3.3	V=	53.583 /	6.9	W=	.392138 /	3.9	T=	31.490 /	.6
LAT= 54.0	U=	18.476 /	3.2	V=	40.340 /	7.4	W=	.458308 /	5.1	T=	36.358 /	1.4
LAT= 60.0	U=	13.021 /	4.3	V=	24.205 /	8.0	W=	.439707 /	5.7	T=	30.054 /	1.6
LAT= 66.0	U=	11.943 /	.6	V=	7.231 /	8.8	W=	.597944 /	6.5	T=	35.275 /	2.6
LAT= 72.0	U=	10.813 /	1.5	V=	7.811 /	.9	W=	.297125 /	7.3	T=	15.596 /	3.4
LAT= 78.0	U=	5.695 /	1.9	V=	17.584 /	1.2	W=	.116413 /	9.4	T=	6.057 /	5.7

Z= 158.420 KM

LAT=-78.0	U=	16.588 /	5.1	V=	19.359 /	2.5	W=	.022671 /	6.9	T=	1.419 /	9.3
LAT=-72.0	U=	23.011 /	5.1	V=	25.536 /	2.3	W=	.032425 /	4.6	T=	4.540 /	10.8
LAT=-66.0	U=	29.031 /	5.2	V=	31.093 /	2.1	W=	.085284 /	3.2	T=	11.236 /	11.4
LAT=-60.0	U=	34.613 /	5.1	V=	35.450 /	1.9	W=	.139320 /	2.3	T=	17.090 /	11.5
LAT=-54.0	U=	36.190 /	4.8	V=	38.451 /	1.6	W=	.171048 /	1.8	T=	19.574 /	11.5
LAT=-48.0	U=	38.535 /	4.5	V=	40.668 /	1.2	W=	.250141 /	1.4	T=	23.162 /	11.3
LAT=-42.0	U=	38.803 /	4.4	V=	42.572 /	.7	W=	.300391 /	1.1	T=	24.499 /	11.1
LAT=-36.0	U=	37.098 /	4.2	V=	44.706 /	.3	W=	.316042 /	.7	T=	22.922 /	10.9
LAT=-30.0	U=	37.656 /	3.9	V=	47.360 /	11.8	W=	.336864 /	.2	T=	20.466 /	10.5
LAT=-24.0	U=	38.583 /	3.8	V=	50.039 /	11.5	W=	.340196 /	11.5	T=	14.634 /	9.9
LAT=-18.0	U=	39.367 /	3.6	V=	50.999 /	11.2	W=	.364035 /	10.7	T=	9.087 /	8.3
LAT=-12.0	U=	42.148 /	3.4	V=	48.546 /	11.0	W=	.449848 /	9.9	T=	14.425 /	6.5
LAT= -6.0	U=	45.196 /	3.3	V=	41.543 /	11.0	W=	.591417 /	9.3	T=	25.207 /	5.8
LAT= 0.0	U=	47.301 /	3.2	V=	30.345 /	11.4	W=	.747720 /	9.1	T=	37.045 /	5.5
LAT= 6.0	U=	47.583 /	3.1	V=	18.860 /	.6	W=	.851248 /	9.0	T=	43.374 /	5.6
LAT= 12.0	U=	46.720 /	3.0	V=	22.065 /	2.7	W=	.870461 /	9.2	T=	44.071 /	5.8
LAT= 18.0	U=	45.477 /	2.9	V=	36.699 /	3.7	W=	.789639 /	9.5	T=	38.639 /	6.0
LAT= 24.0	U=	44.429 /	2.8	V=	51.408 /	4.3	W=	.631257 /	10.1	T=	27.885 /	6.6
LAT= 30.0	U=	43.170 /	2.8	V=	60.462 /	4.8	W=	.460640 /	11.0	T=	16.804 /	7.8
LAT= 36.0	U=	40.821 /	2.8	V=	63.059 /	5.3	W=	.375187 /	.5	T=	16.227 /	10.1
LAT= 42.0	U=	39.346 /	2.9	V=	59.376 /	5.8	W=	.408968 /	1.8	T=	22.784 /	11.4
LAT= 48.0	U=	31.862 /	2.9	V=	51.866 /	6.3	W=	.417037 /	3.0	T=	28.698 /	.3
LAT= 54.0	U=	19.304 /	2.9	V=	40.933 /	6.9	W=	.461782 /	4.3	T=	34.700 /	1.0
LAT= 60.0	U=	14.666 /	4.0	V=	27.176 /	7.4	W=	.470118 /	5.2	T=	29.389 /	1.2
LAT= 66.0	U=	9.155 /	.3	V=	10.433 /	8.2	W=	.658139 /	6.0	T=	33.533 /	2.3
LAT= 72.0	U=	8.923 /	1.6	V=	8.142 /	11.6	W=	.330521 /	6.8	T=	14.710 /	3.0
LAT= 78.0	U=	4.501 /	2.3	V=	19.013 /	.4	W=	.128227 /	8.6	T=	4.850 /	5.3

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 181.310 KM

LAT=-78.0	U=	14.852	/ 4.6	V=	23.834	/ 2.0	W=	.043712	/ 6.6	T=	4.338	/ 7.7
LAT=-72.0	U=	18.897	/ 4.4	V=	26.996	/ 1.7	W=	.049116	/ 5.5	T=	8.395	/ 8.3
LAT=-66.0	U=	23.997	/ 4.4	V=	30.151	/ 1.4	W=	.041296	/ 3.3	T=	12.576	/ 8.8
LAT=-60.0	U=	28.891	/ 4.2	V=	32.910	/ 1.1	W=	.089049	/ 1.0	T=	16.344	/ 9.0
LAT=-54.0	U=	30.530	/ 3.9	V=	35.057	/ .7	W=	.160251	/ .2	T=	16.335	/ 9.2
LAT=-48.0	U=	34.235	/ 3.7	V=	36.748	/ .3	W=	.289342	/ 12.0	T=	18.874	/ 9.3
LAT=-42.0	U=	34.280	/ 3.6	V=	37.765	/ 11.9	W=	.372531	/ 11.7	T=	19.654	/ 9.2
LAT=-36.0	U=	30.676	/ 3.5	V=	38.816	/ 11.4	W=	.412734	/ 11.3	T=	18.432	/ 8.9
LAT=-30.0	U=	31.711	/ 3.3	V=	39.523	/ 10.9	W=	.455643	/ 10.9	T=	18.120	/ 8.4
LAT=-24.0	U=	31.473	/ 3.1	V=	40.077	/ 10.5	W=	.475181	/ 10.4	T=	17.070	/ 7.7
LAT=-18.0	U=	31.899	/ 3.0	V=	40.071	/ 10.3	W=	.491306	/ 9.8	T=	17.625	/ 6.7
LAT=-12.0	U=	33.621	/ 2.8	V=	37.406	/ 10.1	W=	.550943	/ 9.2	T=	22.191	/ 5.8
LAT= -6.0	U=	35.386	/ 2.7	V=	31.526	/ 10.2	W=	.659418	/ 8.6	T=	29.809	/ 5.2
LAT= 0.0	U=	36.904	/ 2.5	V=	23.554	/ 10.6	W=	.801668	/ 8.3	T=	38.146	/ 5.0
LAT= 6.0	U=	37.906	/ 2.4	V=	17.873	/ 11.9	W=	.916083	/ 8.3	T=	43.758	/ 4.9
LAT= 12.0	U=	37.541	/ 2.2	V=	22.912	/ 1.6	W=	.953997	/ 8.4	T=	44.869	/ 5.0
LAT= 18.0	U=	37.282	/ 2.0	V=	34.340	/ 2.4	W=	.905046	/ 8.7	T=	40.263	/ 5.2
LAT= 24.0	U=	37.471	/ 2.0	V=	45.575	/ 2.9	W=	.793913	/ 9.3	T=	30.314	/ 5.6
LAT= 30.0	U=	37.238	/ 1.9	V=	52.413	/ 3.4	W=	.658995	/ 10.2	T=	19.388	/ 6.4
LAT= 36.0	U=	36.727	/ 1.9	V=	54.040	/ 3.9	W=	.604332	/ 11.4	T=	12.260	/ 8.1
LAT= 42.0	U=	37.295	/ 2.1	V=	50.186	/ 4.4	W=	.648629	/ .5	T=	13.876	/ 10.3
LAT= 48.0	U=	31.132	/ 2.1	V=	44.195	/ 5.0	W=	.619439	/ 1.5	T=	20.044	/ 11.6
LAT= 54.0	U=	18.636	/ 2.1	V=	36.083	/ 5.6	W=	.587627	/ 2.7	T=	28.390	/ .6
LAT= 60.0	U=	14.139	/ 3.5	V=	25.983	/ 6.3	W=	.592066	/ 3.8	T=	24.797	/ .5
LAT= 66.0	U=	6.027	/ 11.2	V=	12.222	/ 7.1	W=	.797999	/ 5.0	T=	27.635	/ 1.8
LAT= 72.0	U=	6.547	/ 1.7	V=	9.390	/ 10.1	W=	.420930	/ 5.7	T=	12.646	/ 2.3
LAT= 78.0	U=	3.743	/ 3.1	V=	21.550	/ 11.2	W=	.187029	/ 7.4	T=	3.190	/ 4.0

Z= 209.865 KM

LAT=-78.0	U=	10.683	/ 3.7	V=	21.816	/ 1.6	W=	.050274	/ 6.4	T=	4.565	/ 8.0
LAT=-72.0	U=	12.677	/ 3.2	V=	21.825	/ 1.1	W=	.074295	/ 6.0	T=	10.761	/ 8.2
LAT=-66.0	U=	15.786	/ 3.0	V=	23.091	/ .6	W=	.058007	/ 6.6	T=	19.569	/ 8.1
LAT=-60.0	U=	19.905	/ 2.9	V=	25.144	/ .3	W=	.071381	/ 9.8	T=	25.296	/ 8.0
LAT=-54.0	U=	22.902	/ 2.5	V=	27.130	/ 11.8	W=	.188621	/ 10.6	T=	25.334	/ 8.0
LAT=-48.0	U=	26.921	/ 2.5	V=	29.192	/ 11.3	W=	.362633	/ 10.8	T=	25.846	/ 8.1
LAT=-42.0	U=	26.771	/ 2.4	V=	30.438	/ 10.9	W=	.482442	/ 10.7	T=	27.042	/ 7.9
LAT=-36.0	U=	22.751	/ 2.2	V=	31.151	/ 10.4	W=	.552367	/ 10.3	T=	29.159	/ 7.6
LAT=-30.0	U=	23.224	/ 2.2	V=	31.627	/ 10.1	W=	.597461	/ 10.0	T=	28.822	/ 7.3
LAT=-24.0	U=	23.032	/ 2.1	V=	31.218	/ 9.7	W=	.608919	/ 9.7	T=	29.172	/ 6.9
LAT=-18.0	U=	23.431	/ 2.0	V=	29.933	/ 9.4	W=	.603079	/ 9.1	T=	30.715	/ 6.4
LAT=-12.0	U=	25.326	/ 2.0	V=	27.081	/ 9.3	W=	.623367	/ 8.6	T=	33.149	/ 5.9
LAT= -6.0	U=	27.003	/ 1.9	V=	21.636	/ 9.5	W=	.693446	/ 8.1	T=	37.139	/ 5.4
LAT= 0.0	U=	28.283	/ 1.7	V=	14.949	/ 10.3	W=	.810725	/ 7.7	T=	42.514	/ 5.0
LAT= 6.0	U=	29.000	/ 1.5	V=	16.178	/ 12.0	W=	.907461	/ 7.7	T=	47.662	/ 4.9
LAT= 12.0	U=	29.767	/ 1.2	V=	26.016	/ 1.1	W=	.961168	/ 7.9	T=	49.813	/ 4.9
LAT= 18.0	U=	31.504	/ 1.0	V=	37.511	/ 1.6	W=	.944504	/ 8.3	T=	47.345	/ 5.0
LAT= 24.0	U=	33.981	/ 1.0	V=	48.189	/ 2.0	W=	.864467	/ 8.9	T=	39.379	/ 5.3
LAT= 30.0	U=	36.101	/ .9	V=	54.858	/ 2.4	W=	.794773	/ 9.8	T=	29.964	/ 5.9
LAT= 36.0	U=	37.179	/ 1.0	V=	56.396	/ 2.8	W=	.793335	/ 10.9	T=	21.617	/ 6.7
LAT= 42.0	U=	38.172	/ 1.3	V=	53.038	/ 3.2	W=	.924875	/ 11.9	T=	12.243	/ 8.3
LAT= 48.0	U=	32.062	/ 1.4	V=	45.809	/ 3.7	W=	.943479	/ .8	T=	11.936	/ 10.7
LAT= 54.0	U=	18.565	/ 1.4	V=	36.101	/ 4.3	W=	.860139	/ 1.8	T=	20.869	/ .2
LAT= 60.0	U=	11.249	/ 2.8	V=	25.656	/ 5.0	W=	.796160	/ 3.1	T=	18.495	/ 11.9
LAT= 66.0	U=	6.707	/ 9.6	V=	11.655	/ 6.0	W=	1.007991	/ 4.3	T=	21.424	/ 1.5
LAT= 72.0	U=	4.313	/ 1.8	V=	10.841	/ 9.3	W=	.552786	/ 4.9	T=	11.502	/ 1.7
LAT= 78.0	U=	3.339	/ 3.4	V=	25.269	/ 10.4	W=	.273698	/ 6.7	T=	2.987	/ 2.6

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 240.988 KM

LAT=-78.0	U=	8.373 /	2.9	V=	17.876 /	1.5	W=	.076536 /	5.8	T=	4.074 /	8.7
LAT=-72.0	U=	11.547 /	2.0	V=	16.114 /	.7	W=	.129853 /	6.0	T=	10.297 /	8.5
LAT=-66.0	U=	15.917 /	1.6	V=	17.668 /	12.0	W=	.166079 /	6.5	T=	20.447 /	8.1
LAT=-60.0	U=	20.707 /	1.5	V=	20.795 /	11.3	W=	.144112 /	7.7	T=	28.017 /	8.0
LAT=-54.0	U=	25.069 /	1.3	V=	24.459 /	10.9	W=	.202327 /	9.5	T=	30.265 /	7.8
LAT=-48.0	U=	28.144 /	1.6	V=	27.147 /	10.5	W=	.399930 /	10.3	T=	31.313 /	7.7
LAT=-42.0	U=	27.952 /	1.5	V=	28.542 /	10.1	W=	.541496 /	10.2	T=	33.961 /	7.5
LAT=-36.0	U=	25.072 /	1.1	V=	28.364 /	9.8	W=	.619509 /	9.8	T=	38.708 /	7.2
LAT=-30.0	U=	23.968 /	1.2	V=	27.756 /	9.4	W=	.665931 /	9.6	T=	38.470 /	7.0
LAT=-24.0	U=	23.080 /	1.2	V=	26.320 /	8.9	W=	.665555 /	9.3	T=	38.669 /	6.7
LAT=-18.0	U=	22.623 /	1.1	V=	23.771 /	8.6	W=	.643026 /	8.8	T=	40.266 /	6.3
LAT=-12.0	U=	23.208 /	1.1	V=	19.649 /	8.6	W=	.625628 /	8.1	T=	41.276 /	5.9
LAT= -6.0	U=	24.011 /	1.0	V=	13.790 /	8.9	W=	.661152 /	7.5	T=	43.389 /	5.5
LAT= 0.0	U=	25.340 /	1.0	V=	8.845 /	10.4	W=	.757294 /	7.2	T=	47.420 /	5.2
LAT= 6.0	U=	26.508 /	.7	V=	15.205 /	.3	W=	.838894 /	7.1	T=	52.030 /	5.0
LAT= 12.0	U=	28.831 /	.5	V=	27.719 /	.9	W=	.869090 /	7.4	T=	54.684 /	5.0
LAT= 18.0	U=	32.055 /	.3	V=	40.086 /	1.3	W=	.832093 /	7.9	T=	53.208 /	5.0
LAT= 24.0	U=	35.264 /	.3	V=	51.596 /	1.6	W=	.805755 /	8.7	T=	46.709 /	5.3
LAT= 30.0	U=	38.554 /	.4	V=	59.416 /	1.8	W=	.806943 /	9.7	T=	38.493 /	5.8
LAT= 36.0	U=	40.506 /	.6	V=	62.518 /	2.2	W=	.879353 /	10.8	T=	30.021 /	6.5
LAT= 42.0	U=	41.057 /	.9	V=	59.042 /	2.6	W=	1.142068 /	11.8	T=	16.606 /	7.4
LAT= 48.0	U=	34.303 /	1.1	V=	52.142 /	3.1	W=	1.211718 /	.5	T=	8.958 /	9.7
LAT= 54.0	U=	19.561 /	1.0	V=	42.105 /	3.6	W=	1.126934 /	1.4	T=	16.244 /	11.9
LAT= 60.0	U=	11.134 /	2.2	V=	28.575 /	4.3	W=	.964519 /	2.8	T=	15.301 /	11.4
LAT= 66.0	U=	8.387 /	9.0	V=	12.208 /	5.3	W=	1.176823 /	3.9	T=	17.804 /	1.3
LAT= 72.0	U=	2.767 /	1.8	V=	11.362 /	9.0	W=	.642373 /	4.6	T=	11.136 /	1.4
LAT= 78.0	U=	2.552 /	3.6	V=	27.576 /	10.1	W=	.357940 /	6.5	T=	3.341 /	1.9

Z= 272.801 KM

LAT=-78.0	U=	6.640 /	2.4	V=	14.835 /	1.6	W=	.124430 /	5.7	T=	4.123 /	9.4
LAT=-72.0	U=	11.636 /	1.3	V=	11.975 /	.5	W=	.200501 /	6.0	T=	9.955 /	8.9
LAT=-66.0	U=	17.593 /	.9	V=	14.645 /	11.4	W=	.288424 /	6.3	T=	19.924 /	8.3
LAT=-60.0	U=	23.233 /	.9	V=	19.372 /	10.8	W=	.256805 /	6.9	T=	28.105 /	8.1
LAT=-54.0	U=	28.463 /	.9	V=	24.118 /	10.4	W=	.202417 /	8.5	T=	31.800 /	7.8
LAT=-48.0	U=	30.879 /	1.2	V=	27.315 /	10.0	W=	.380525 /	9.9	T=	32.916 /	7.7
LAT=-42.0	U=	30.941 /	1.1	V=	28.652 /	9.7	W=	.526364 /	9.9	T=	36.779 /	7.4
LAT=-36.0	U=	29.315 /	.7	V=	27.985 /	9.3	W=	.590940 /	9.5	T=	44.515 /	7.0
LAT=-30.0	U=	27.195 /	.7	V=	26.763 /	8.9	W=	.648447 /	9.3	T=	43.370 /	6.9
LAT=-24.0	U=	25.552 /	.7	V=	24.651 /	8.5	W=	.642272 /	8.9	T=	43.663 /	6.6
LAT=-18.0	U=	24.647 /	.6	V=	21.104 /	8.1	W=	.592711 /	8.4	T=	45.087 /	6.3
LAT=-12.0	U=	24.261 /	.6	V=	15.872 /	7.9	W=	.584003 /	7.6	T=	45.279 /	6.0
LAT= -6.0	U=	24.503 /	.5	V=	8.713 /	8.0	W=	.629408 /	7.0	T=	46.766 /	5.6
LAT= 0.0	U=	25.356 /	.4	V=	4.301 /	11.1	W=	.709661 /	6.5	T=	50.092 /	5.2
LAT= 6.0	U=	27.184 /	.2	V=	15.286 /	.5	W=	.771900 /	6.5	T=	54.514 /	5.1
LAT= 12.0	U=	29.760 /	12.0	V=	28.818 /	.9	W=	.769963 /	6.8	T=	57.415 /	5.1
LAT= 18.0	U=	33.436 /	11.9	V=	41.777 /	1.1	W=	.705105 /	7.5	T=	56.739 /	5.1
LAT= 24.0	U=	36.976 /	12.0	V=	53.944 /	1.4	W=	.680844 /	8.5	T=	50.790 /	5.3
LAT= 30.0	U=	40.775 /	.2	V=	62.581 /	1.6	W=	.738989 /	9.7	T=	43.074 /	5.8
LAT= 36.0	U=	43.001 /	.4	V=	66.517 /	1.9	W=	.892085 /	10.8	T=	35.083 /	6.4
LAT= 42.0	U=	42.750 /	.8	V=	64.246 /	2.3	W=	1.284221 /	11.7	T=	20.067 /	7.1
LAT= 48.0	U=	35.453 /	.9	V=	56.884 /	2.8	W=	1.408546 /	.4	T=	8.754 /	8.9
LAT= 54.0	U=	20.220 /	.9	V=	45.410 /	3.3	W=	1.326611 /	1.2	T=	13.997 /	11.8
LAT= 60.0	U=	10.421 /	1.9	V=	31.427 /	3.9	W=	1.078865 /	2.6	T=	14.333 /	11.1
LAT= 66.0	U=	10.104 /	8.7	V=	13.074 /	4.9	W=	1.286623 /	3.8	T=	16.131 /	1.2
LAT= 72.0	U=	1.813 /	1.8	V=	11.527 /	8.8	W=	.679817 /	4.5	T=	10.962 /	1.3
LAT= 78.0	U=	1.843 /	4.0	V=	28.987 /	10.0	W=	.425757 /	6.5	T=	3.595 /	1.7

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 304.762 KM

LAT=-78.0	U=	5.562	1.8	V=	12.290	1.7	W=	.176168	5.7	T=	4.410	9.7
LAT=-72.0	U=	12.197	.9	V=	9.343	.4	W=	.269789	6.0	T=	9.922	9.1
LAT=-66.0	U=	19.497	.5	V=	13.005	11.1	W=	.405863	6.2	T=	19.453	8.5
LAT=-60.0	U=	25.192	.6	V=	18.878	10.4	W=	.383159	6.6	T=	27.423	8.2
LAT=-54.0	U=	29.691	.6	V=	24.287	10.1	W=	.231184	7.5	T=	31.499	7.9
LAT=-48.0	U=	32.373	.9	V=	27.253	9.8	W=	.342987	9.4	T=	33.564	7.7
LAT=-42.0	U=	32.884	.9	V=	28.285	9.5	W=	.477954	9.6	T=	38.248	7.4
LAT=-36.0	U=	31.895	.5	V=	28.160	9.0	W=	.516623	9.1	T=	46.105	7.1
LAT=-30.0	U=	29.554	.5	V=	26.615	8.7	W=	.584209	8.9	T=	44.985	6.8
LAT=-24.0	U=	27.635	.5	V=	24.046	8.3	W=	.576662	8.5	T=	45.146	6.5
LAT=-18.0	U=	26.423	.4	V=	20.054	7.8	W=	.533833	7.9	T=	46.371	6.3
LAT=-12.0	U=	25.416	.4	V=	14.454	7.5	W=	.531444	7.1	T=	46.164	5.9
LAT= -6.0	U=	25.361	.2	V=	6.895	7.2	W=	.595021	6.3	T=	47.882	5.5
LAT= 0.0	U=	26.144	12.0	V=	3.525	.5	W=	.707554	5.8	T=	50.946	5.3
LAT= 6.0	U=	27.772	11.9	V=	15.908	.7	W=	.751090	5.8	T=	55.479	5.1
LAT= 12.0	U=	30.570	11.8	V=	29.840	.9	W=	.696315	6.1	T=	58.619	5.0
LAT= 18.0	U=	34.553	11.7	V=	43.075	1.1	W=	.550436	6.8	T=	58.167	5.1
LAT= 24.0	U=	38.170	11.9	V=	55.680	1.3	W=	.466527	8.2	T=	52.333	5.3
LAT= 30.0	U=	42.317	.1	V=	65.082	1.5	W=	.602915	9.9	T=	44.855	5.7
LAT= 36.0	U=	44.857	.3	V=	69.996	1.8	W=	.866810	11.1	T=	37.039	6.3
LAT= 42.0	U=	44.515	.7	V=	67.744	2.2	W=	1.394910	11.8	T=	21.499	7.0
LAT= 48.0	U=	36.834	.9	V=	60.266	2.6	W=	1.580183	.3	T=	8.892	8.6
LAT= 54.0	U=	20.950	.9	V=	49.220	3.2	W=	1.501066	1.1	T=	12.938	11.7
LAT= 60.0	U=	11.237	1.7	V=	33.391	3.8	W=	1.142942	2.7	T=	13.888	11.0
LAT= 66.0	U=	11.196	6	V=	13.533	4.7	W=	1.359420	3.7	T=	15.572	1.2
LAT= 72.0	U=	1.870	1.7	V=	11.736	8.9	W=	.700602	4.5	T=	10.874	1.3
LAT= 78.0	U=	1.9	3.8	V=	29.873	10.0	W=	.463291	6.5	T=	3.703	1.7

Z= 336.754 KM

LAT=-78.0	U=	4.859	1.6	V=	11.480	1.9	W=	.225768	5.6	T=	4.696	9.9
LAT=-72.0	U=	12.337	.7	V=	8.281	.4	W=	.337681	5.9	T=	10.104	9.3
LAT=-66.0	U=	20.110	.3	V=	12.060	10.9	W=	.523252	6.1	T=	19.497	8.7
LAT=-60.0	U=	2 353	.4	V=	18.521	10.2	W=	.516267	6.4	T=	27.505	8.3
LAT=-54.0	U=	31.793	.5	V=	24.107	9.9	W=	.327224	6.9	T=	31.797	7.9
LAT=-48.0	U=	33.650	.8	V=	27.550	9.6	W=	.311254	8.8	T=	33.813	7.7
LAT=-42.0	U=	34.021	.8	V=	28.773	9.4	W=	.409040	9.2	T=	38.522	7.4
LAT=-36.0	U=	33.562	.3	V=	28.151	9.0	W=	.431583	8.6	T=	46.667	7.1
LAT=-30.0	U=	31.064	.4	V=	26.670	8.5	W=	.506682	8.4	T=	45.627	6.8
LAT=-24.0	U=	28.973	.4	V=	23.808	8.0	W=	.498657	8.0	T=	45.880	6.5
LAT=-18.0	U=	27.605	.2	V=	19.563	7.6	W=	.466876	7.2	T=	47.459	6.2
LAT=-12.0	U=	26.371	.2	V=	13.809	7.1	W=	.514571	6.3	T=	47.426	5.9
LAT= -6.0	U=	26.149	.1	V=	6.243	6.6	W=	.623897	5.6	T=	48.665	5.5
LAT= 0.0	U=	26.819	11.9	V=	4.483	1.5	W=	.764463	5.2	T=	51.810	5.3
LAT= 6.0	U=	28.540	11.8	V=	16.754	.9	W=	.794222	5.1	T=	56.464	5.1
LAT= 12.0	U=	31.418	11.7	V=	30.943	.8	W=	.692141	5.3	T=	59.734	5.0
LAT= 18.0	U=	35.385	11.7	V=	44.390	1.0	W=	.444503	5.9	T=	59.387	5.1
LAT= 24.0	U=	39.036	11.8	V=	57.212	1.2	W=	.260776	8.0	T=	53.684	5.4
LAT= 30.0	U=	43.467	12.0	V=	67.106	1.5	W=	.482018	10.4	T=	46.361	5.7
LAT= 36.0	U=	46.328	.2	V=	72.525	1.7	W=	.847899	11.4	T=	38.156	6.3
LAT= 42.0	U=	45.738	.7	V=	70.686	2.1	W=	1.497956	11.9	T=	22.179	6.9
LAT= 48.0	U=	37.973	.9	V=	62.958	2.5	W=	1.725374	.4	T=	8.815	8.4
LAT= 54.0	U=	21.424	.9	V=	50.721	3.1	W=	1.613031	1.0	T=	12.441	11.7
LAT= 60.0	U=	11.746	1.6	V=	35.254	3.7	W=	1.195097	2.6	T=	13.628	11.0
LAT= 66.0	U=	10.454	8.7	V=	14.929	4.6	W=	1.400647	3.6	T=	15.237	1.2
LAT= 72.0	U=	1.574	1.4	V=	11.587	8.8	W=	.692912	4.5	T=	10.799	1.3
LAT= 78.0	U=	1.187	4.3	V=	30.445	9.9	W=	.501367	6.6	T=	3.708	1.7

Table B4. Amplitude and Phase of Solar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 368.753 KM

LAT=-78.0	U=	4.755	/	1.0	V=	10.388	/	2.1	W=	.267554	/	5.7	T=	4.959 / 10.1
LAT=-72.0	U=	13.340	/	.5	V=	6.475	/	.2	W=	.406000	/	6.0	T=	10.367 / 9.4
LAT=-66.0	U=	22.150	/	.2	V=	11.452	/	10.6	W=	.643142	/	6.1	T=	19.657 / 8.7
LAT=-60.0	U=	28.272	/	.3	V=	18.105	/	10.1	W=	.658658	/	6.2	T=	27.738 / 8.3
LAT=-54.0	U=	31.726	/	.4	V=	24.024	/	9.9	W=	.432318	/	6.5	T=	32.228 / 7.9
LAT=-48.0	U=	33.834	/	.8	V=	27.382	/	9.6	W=	.299106	/	8.1	T=	34.542 / 7.7
LAT=-42.0	U=	34.608	/	.8	V=	28.611	/	9.3	W=	.344494	/	8.6	T=	39.637 / 7.4
LAT=-36.0	U=	34.541	/	.3	V=	28.484	/	8.8	W=	.378849	/	7.8	T=	48.188 / 7.1
LAT=-30.0	U=	31.856	/	.4	V=	26.973	/	8.4	W=	.441181	/	7.8	T=	46.619 / 6.8
LAT=-24.0	U=	29.785	/	.3	V=	23.808	/	8.0	W=	.440909	/	7.3	T=	46.798 / 6.5
LAT=-18.0	U=	28.439	/	.1	V=	19.404	/	7.5	W=	.452614	/	6.5	T=	48.519 / 6.2
LAT=-12.0	U=	27.005	/	.1	V=	13.400	/	7.1	W=	.557898	/	5.6	T=	48.507 / 5.9
LAT= -6.0	U=	26.687	/	12.0	V=	6.054	/	6.2	W=	.704399	/	5.0	T=	49.775 / 5.5
LAT= 0.0	U=	27.380	/	11.8	V=	5.609	/	1.7	W=	.871399	/	4.7	T=	52.967 / 5.3
LAT= 6.0	U=	29.018	/	11.7	V=	17.714	/	.9	W=	.894446	/	4.6	T=	57.654 / 5.1
LAT= 12.0	U=	31.935	/	11.6	V=	32.028	/	.8	W=	.766509	/	4.7	T=	60.924 / 5.1
LAT= 18.0	U=	36.052	/	11.6	V=	45.690	/	.9	W=	.468753	/	4.7	T=	60.848 / 5.1
LAT= 24.0	U=	39.862	/	11.8	V=	58.720	/	1.2	W=	.075494	/	7.0	T=	55.077 / 5.3
LAT= 30.0	U=	44.433	/	11.9	V=	69.012	/	1.4	W=	.424335	/	11.1	T=	47.520 / 5.7
LAT= 36.0	U=	47.495	/	.2	V=	74.302	/	1.7	W=	.845929	/	11.8	T=	39.623 / 6.3
LAT= 42.0	U=	46.822	/	.7	V=	72.452	/	2.1	W=	1.567103	/	12.0	T=	23.448 / 6.9
LAT= 48.0	U=	38.953	/	.9	V=	64.513	/	2.5	W=	1.842678	/	.4	T=	9.329 / 8.3
LAT= 54.0	U=	22.209	/	.8	V=	51.913	/	3.1	W=	1.733984	/	.9	T=	12.158 / 11.7
LAT= 60.0	U=	10.940	/	1.4	V=	35.468	/	3.7	W=	1.223447	/	2.6	T=	13.430 / 10.9
LAT= 66.0	U=	12.212	/	8.7	V=	14.323	/	4.5	W=	1.421845	/	3.6	T=	14.948 / 1.2
LAT= 72.0	U=	1.812	/	1.1	V=	11.632	/	8.9	W=	.678629	/	4.5	T=	10.752 / 1.2
LAT= 78.0	U=	1.026	/	3.9	V=	30.934	/	9.9	W=	.524640	/	6.6	T=	3.621 / 1.5

Z= 400.753 KM

LAT=-78.0	U=	4.155	/	1.0	V=	10.956	/	2.2	W=	.307319	/	5.7	T=	5.165 / 10.1
LAT=-72.0	U=	12.583	/	.4	V=	6.165	/	.4	W=	.474556	/	6.0	T=	10.655 / 9.5
LAT=-66.0	U=	21.153	/	.1	V=	10.947	/	10.6	W=	.764719	/	6.1	T=	19.970 / 8.7
LAT=-60.0	U=	27.679	/	.2	V=	17.826	/	10.1	W=	.795584	/	6.1	T=	28.077 / 8.3
LAT=-54.0	U=	32.353	/	.4	V=	23.994	/	9.8	W=	.553846	/	6.1	T=	32.641 / 7.9
LAT=-48.0	U=	34.489	/	.8	V=	27.661	/	9.5	W=	.323798	/	7.3	T=	35.038 / 7.7
LAT=-42.0	U=	35.192	/	.7	V=	29.228	/	9.2	W=	.307584	/	7.8	T=	40.325 / 7.4
LAT=-36.0	U=	35.407	/	.2	V=	28.731	/	8.8	W=	.373409	/	6.8	T=	49.198 / 7.1
LAT=-30.0	U=	32.591	/	.2	V=	27.094	/	8.4	W=	.422352	/	6.9	T=	48.262 / 6.9
LAT=-24.0	U=	30.383	/	.2	V=	23.907	/	7.9	W=	.438151	/	6.4	T=	48.343 / 6.6
LAT=-18.0	U=	29.023	/	.1	V=	19.360	/	7.4	W=	.507764	/	5.6	T=	49.684 / 6.2
LAT=-12.0	U=	27.550	/	.1	V=	13.245	/	6.9	W=	.665815	/	4.9	T=	49.700 / 5.9
LAT= -6.0	U=	27.226	/	11.9	V=	5.534	/	6.1	W=	.841949	/	4.5	T=	51.006 / 5.5
LAT= 0.0	U=	27.963	/	11.8	V=	6.362	/	1.7	W=	1.012303	/	4.3	T=	54.257 / 5.3
LAT= 6.0	U=	29.622	/	11.6	V=	18.740	/	.9	W=	1.049390	/	4.1	T=	59.028 / 5.1
LAT= 12.0	U=	32.561	/	11.5	V=	33.111	/	.8	W=	.933974	/	4.0	T=	62.351 / 5.1
LAT= 18.0	U=	36.688	/	11.6	V=	46.919	/	.9	W=	.619688	/	3.8	T=	62.275 / 5.1
LAT= 24.0	U=	40.462	/	11.7	V=	60.210	/	1.1	W=	.234115	/	2.9	T=	56.348 / 5.3
LAT= 30.0	U=	45.296	/	11.9	V=	70.420	/	1.3	W=	.437879	/	.2	T=	48.648 / 5.7
LAT= 36.0	U=	48.576	/	.2	V=	75.884	/	1.7	W=	.879759	/	.2	T=	40.666 / 6.3
LAT= 42.0	U=	47.829	/	.7	V=	74.348	/	2.0	W=	1.635713	/	.1	T=	24.054 / 6.9
LAT= 48.0	U=	39.852	/	.8	V=	65.490	/	2.4	W=	1.930841	/	.4	T=	9.404 / 8.2
LAT= 54.0	U=	23.070	/	.8	V=	52.976	/	3.1	W=	1.805437	/	.9	T=	11.980 / 11.7
LAT= 60.0	U=	12.718	/	1.3	V=	36.238	/	3.6	W=	1.229995	/	2.7	T=	13.900 / 10.7
LAT= 66.0	U=	11.394	/	8.9	V=	14.639	/	4.5	W=	1.423651	/	3.5	T=	14.565 / 1.2
LAT= 72.0	U=	2.335	/	1.1	V=	11.494	/	8.9	W=	.651433	/	4.5	T=	10.708 / 1.2
LAT= 78.0	U=	.758	/	3.5	V=	31.249	/	9.9	W=	.543449	/	6.7	T=	3.601 / 1.5

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes

Z= 0.000 KM

LAT= 0.0	U=	.014	/ 5.7	V=	0.000	/ 3.1	W=	0.000000	/ 12.0	T=	.008	/ .7
LAT= 6.0	U=	.016	/ 5.8	V=	.005	/ 8.7	W=	0.000000	/ 12.0	T=	.008	/ .7
LAT= 12.0	U=	.016	/ 5.8	V=	.009	/ 8.7	W=	0.000000	/ 12.0	T=	.008	/ .7
LAT= 18.0	U=	.017	/ 5.8	V=	.013	/ 8.7	W=	0.000000	/ 12.0	T=	.007	/ .7
LAT= 24.0	U=	.018	/ 5.8	V=	.017	/ 8.8	W=	0.000000	/ 12.0	T=	.006	/ .7
LAT= 30.0	U=	.018	/ 5.8	V=	.019	/ 8.8	W=	0.000000	/ 12.0	T=	.005	/ .7
LAT= 36.0	U=	.018	/ 5.9	V=	.020	/ 8.8	W=	0.000000	/ 12.0	T=	.004	/ .8
LAT= 42.0	U=	.017	/ 5.9	V=	.019	/ 8.9	W=	0.000000	/ 12.0	T=	.002	/ .8
LAT= 48.0	U=	.016	/ 5.9	V=	.017	/ 8.9	W=	0.000000	/ 12.0	T=	.001	/ .8
LAT= 54.0	U=	.014	/ 5.9	V=	.015	/ 8.9	W=	0.000000	/ 12.0	T=	.001	/ .9
LAT= 60.0	U=	.012	/ 5.9	V=	.012	/ 8.9	W=	0.000000	/ 12.0	T=	0.000	/ .9
LAT= 66.0	U=	.010	/ 5.9	V=	.010	/ 9.0	W=	0.000000	/ 12.0	T=	0.000	/ 1.0
LAT= 72.0	U=	.008	/ 6.0	V=	.008	/ 9.0	W=	0.000000	/ 12.0	T=	0.000	/ 5.3
LAT= 78.0	U=	.005	/ 5.9	V=	.006	/ 8.9	W=	0.000000	/ 12.0	T=	0.000	/ 5.5

Z= 2.078 KM

LAT= 0.0	U=	.017	/ 6.0	V=	0.000	/ 3.0	W=	.000001	/ 10.4	T=	.010	/ 11.9
LAT= 6.0	U=	.018	/ 6.0	V=	.006	/ 8.9	W=	.000001	/ 10.7	T=	.010	/ 11.9
LAT= 12.0	U=	.018	/ 6.0	V=	.011	/ 8.9	W=	.000002	/ 11.1	T=	.009	/ 11.9
LAT= 18.0	U=	.019	/ 6.0	V=	.016	/ 8.9	W=	.000002	/ 11.4	T=	.008	/ 11.9
LAT= 24.0	U=	.020	/ 6.0	V=	.019	/ 9.0	W=	.000002	/ 11.7	T=	.007	/ 11.9
LAT= 30.0	U=	.020	/ 6.1	V=	.021	/ 9.1	W=	.000002	/ .3	T=	.006	/ 12.0
LAT= 36.0	U=	.020	/ 6.1	V=	.022	/ 9.1	W=	.000002	/ 1.1	T=	.004	/ 12.0
LAT= 42.0	U=	.020	/ 6.1	V=	.022	/ 9.1	W=	.000002	/ 1.8	T=	.003	/ 12.0
LAT= 48.0	U=	.019	/ 6.2	V=	.021	/ 9.2	W=	.000002	/ 2.1	T=	.002	/ 12.0
LAT= 54.0	U=	.018	/ 6.2	V=	.019	/ 9.2	W=	.000001	/ 2.2	T=	.001	/ 12.0
LAT= 60.0	U=	.015	/ 6.2	V=	.016	/ 9.2	W=	.000001	/ 1.6	T=	0.000	/ 12.0
LAT= 66.0	U=	.013	/ 6.2	V=	.013	/ 9.2	W=	0.000000	/ 9.6	T=	0.000	/ 11.6
LAT= 72.0	U=	.010	/ 6.2	V=	.010	/ 9.2	W=	.000001	/ 8.5	T=	0.000	/ 5.5
LAT= 78.0	U=	.007	/ 6.3	V=	.007	/ 9.3	W=	.000002	/ 8.1	T=	0.000	/ 4.9

Z= 4.161 KM

LAT= 0.0	U=	.018	/ 6.0	V=	0.000	/ 3.0	W=	.000003	/ 8.0	T=	.010	/ 12.0
LAT= 6.0	U=	.018	/ 6.0	V=	.006	/ 8.8	W=	.000003	/ 8.4	T=	.010	/ 12.0
LAT= 12.0	U=	.019	/ 6.0	V=	.011	/ 8.8	W=	.000002	/ 9.9	T=	.010	/ 12.0
LAT= 18.0	U=	.020	/ 6.0	V=	.016	/ 8.9	W=	.000003	/ 11.4	T=	.009	/ 12.0
LAT= 24.0	U=	.020	/ 6.0	V=	.019	/ 8.9	W=	.000004	/ 12.0	T=	.008	/ 12.0
LAT= 30.0	U=	.021	/ 6.1	V=	.022	/ 9.0	W=	.000005	/ .3	T=	.006	/ .1
LAT= 36.0	U=	.021	/ 6.1	V=	.023	/ 9.1	W=	.000005	/ .6	T=	.005	/ .1
LAT= 42.0	U=	.021	/ 6.2	V=	.023	/ 9.2	W=	.000004	/ .9	T=	.003	/ .1
LAT= 48.0	U=	.020	/ 6.2	V=	.022	/ 9.2	W=	.000003	/ 1.1	T=	.002	/ .1
LAT= 54.0	U=	.019	/ 6.3	V=	.020	/ 9.3	W=	.000002	/ 1.1	T=	.001	/ .1
LAT= 60.0	U=	.016	/ 6.3	V=	.017	/ 9.3	W=	.000001	/ .4	T=	.001	/ .1
LAT= 66.0	U=	.013	/ 6.3	V=	.014	/ 9.3	W=	.000001	/ 10.8	T=	0.000	/ 11.9
LAT= 72.0	U=	.011	/ 6.4	V=	.011	/ 9.3	W=	.000001	/ 9.1	T=	0.000	/ 2.1
LAT= 78.0	U=	.007	/ 6.4	V=	.007	/ 9.4	W=	.000002	/ 8.6	T=	0.000	/ 4.7

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 9.525 KM

LAT= 0.0	U=	.019 /	6.0	V=	0.000 /	3.0	W=	.000008 /	6.8	T=	.011 /	12.0
LAT= 6.0	U=	.020 /	6.0	V=	.006 /	9.0	W=	.000006 /	6.7	T=	.011 /	12.0
LAT= 12.0	U=	.020 /	6.0	V=	.012 /	9.0	W=	.000002 /	3.5	T=	.010 /	12.0
LAT= 18.0	U=	.021 /	6.0	V=	.017 /	9.0	W=	.000009 /	1.7	T=	.010 /	12.0
LAT= 24.0	U=	.023 /	6.0	V=	.021 /	9.0	W=	.000015 /	1.4	T=	.009 /	11.9
LAT= 30.0	U=	.024 /	6.0	V=	.024 /	9.0	W=	.000017 /	1.3	T=	.007 /	11.9
LAT= 36.0	U=	.024 /	6.0	V=	.026 /	9.0	W=	.000017 /	1.1	T=	.006 /	11.9
LAT= 42.0	U=	.024 /	6.0	V=	.027 /	9.0	W=	.000014 /	1.0	T=	.004 /	11.8
LAT= 48.0	U=	.024 /	6.0	V=	.026 /	9.0	W=	.000010 /	.8	T=	.003 /	11.8
LAT= 54.0	U=	.022 /	6.0	V=	.024 /	9.0	W=	.000006 /	.5	T=	.002 /	11.8
LAT= 60.0	U=	.020 /	6.0	V=	.021 /	9.0	W=	.000004 /	11.9	T=	.001 /	11.7
LAT= 66.0	U=	.016 /	6.0	V=	.017 /	9.0	W=	.000002 /	11.7	T=	0.000 /	11.6
LAT= 72.0	U=	.013 /	6.0	V=	.013 /	9.0	W=	.000001 /	10.1	T=	0.000 /	11.8
LAT= 78.0	U=	.008 /	6.1	V=	.008 /	9.0	W=	.000003 /	9.5	T=	0.000 /	6.6

Z= 14.879 KM

LAT= 0.0	U=	.023 /	6.0	V=	0.000 /	3.0	W=	.000028 /	4.2	T=	.014 /	.1
LAT= 6.0	U=	.024 /	6.0	V=	.006 /	9.1	W=	.000027 /	4.0	T=	.014 /	.1
LAT= 12.0	U=	.024 /	6.0	V=	.013 /	9.1	W=	.000026 /	3.2	T=	.013 /	12.0
LAT= 18.0	U=	.026 /	6.0	V=	.020 /	9.1	W=	.000029 /	2.3	T=	.012 /	11.9
LAT= 24.0	U=	.028 /	6.0	V=	.026 /	9.0	W=	.000034 /	1.7	T=	.011 /	11.8
LAT= 30.0	U=	.030 /	6.0	V=	.031 /	9.0	W=	.000036 /	1.3	T=	.009 /	11.7
LAT= 36.0	U=	.031 /	6.0	V=	.033 /	9.0	W=	.000034 /	1.1	T=	.007 /	11.6
LAT= 42.0	U=	.031 /	6.0	V=	.034 /	9.0	W=	.000028 /	.8	T=	.005 /	11.5
LAT= 48.0	U=	.030 /	6.0	V=	.032 /	9.0	W=	.000021 /	.6	T=	.004 /	11.4
LAT= 54.0	U=	.027 /	5.9	V=	.029 /	9.0	W=	.000013 /	.4	T=	.002 /	11.4
LAT= 60.0	U=	.023 /	5.9	V=	.025 /	8.9	W=	.000008 /	11.9	T=	.001 /	11.2
LAT= 66.0	U=	.019 /	5.9	V=	.020 /	8.9	W=	.000003 /	.2	T=	.001 /	11.3
LAT= 72.0	U=	.015 /	5.9	V=	.015 /	8.9	W=	.000002 /	11.5	T=	0.000 /	11.2
LAT= 78.0	U=	.010 /	5.9	V=	.009 /	8.9	W=	.000003 /	9.9	T=	0.000 /	7.5

Z= 20.239 KM

LAT= 0.0	U=	.035 /	6.1	V=	0.000 /	3.0	W=	.000099 /	3.4	T=	.026 /	.1
LAT= 6.0	U=	.036 /	6.1	V=	.009 /	9.6	W=	.000094 /	3.3	T=	.025 /	.1
LAT= 12.0	U=	.037 /	6.1	V=	.019 /	9.4	W=	.000081 /	3.0	T=	.024 /	12.0
LAT= 18.0	U=	.039 /	6.0	V=	.028 /	9.3	W=	.000067 /	2.6	T=	.021 /	11.9
LAT= 24.0	U=	.042 /	6.0	V=	.038 /	9.1	W=	.000056 /	2.0	T=	.018 /	11.7
LAT= 30.0	U=	.045 /	5.9	V=	.046 /	9.0	W=	.000050 /	1.4	T=	.015 /	11.5
LAT= 36.0	U=	.048 /	5.8	V=	.051 /	8.9	W=	.000045 /	.9	T=	.011 /	11.3
LAT= 42.0	U=	.049 /	5.8	V=	.053 /	8.8	W=	.000037 /	.6	T=	.008 /	11.2
LAT= 48.0	U=	.048 /	5.7	V=	.052 /	8.7	W=	.000028 /	.4	T=	.005 /	11.0
LAT= 54.0	U=	.045 /	5.7	V=	.048 /	8.7	W=	.000018 /	.3	T=	.003 /	11.0
LAT= 60.0	U=	.039 /	5.7	V=	.041 /	8.7	W=	.000011 /	11.9	T=	.002 /	10.7
LAT= 66.0	U=	.032 /	5.7	V=	.033 /	8.7	W=	.000005 /	.9	T=	.001 /	11.1
LAT= 72.0	U=	.025 /	5.7	V=	.025 /	8.7	W=	.000002 /	.4	T=	0.000 /	11.0
LAT= 78.0	U=	.016 /	5.6	V=	.016 /	8.7	W=	.000003 /	10.4	T=	0.000 /	8.2

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 25.607 KM

LAT= 0.0	U=	.060	/ 6.1	V=	0.000	/ 3.0	W=	.000209	/ 2.9	T=	.048	/ 12.0
LAT= 6.0	U=	.061	/ 6.1	V=	.020	/ 9.7	W=	.000197	/ 2.9	T=	.046	/ 12.0
LAT= 12.0	U=	.063	/ 6.1	V=	.038	/ 9.6	W=	.000184	/ 2.8	T=	.041	/ 11.9
LAT= 18.0	U=	.066	/ 6.0	V=	.053	/ 9.4	W=	.000130	/ 2.7	T=	.035	/ 11.9
LAT= 24.0	U=	.069	/ 6.0	V=	.065	/ 9.2	W=	.000076	/ 2.6	T=	.027	/ 11.8
LAT= 30.0	U=	.072	/ 5.9	V=	.074	/ 9.0	W=	.000040	/ 2.1	T=	.020	/ 11.6
LAT= 36.0	U=	.074	/ 5.7	V=	.080	/ 8.8	W=	.000020	/ 1.0	T=	.014	/ 11.5
LAT= 42.0	U=	.075	/ 5.6	V=	.082	/ 8.7	W=	.000016	/ 11.6	T=	.009	/ 11.3
LAT= 48.0	U=	.073	/ 5.5	V=	.080	/ 8.5	W=	.000015	/ 10.9	T=	.005	/ 11.1
LAT= 54.0	U=	.069	/ 5.4	V=	.073	/ 8.4	W=	.000011	/ 10.8	T=	.003	/ 11.0
LAT= 60.0	U=	.060	/ 5.4	V=	.064	/ 8.4	W=	.000010	/ 10.4	T=	.001	/ 10.4
LAT= 66.0	U=	.051	/ 5.4	V=	.052	/ 8.4	W=	.000002	/ .8	T=	.001	/ 11.2
LAT= 72.0	U=	.039	/ 5.4	V=	.039	/ 8.3	W=	.000003	/ 10.6	T=	0.000	/ 10.3
LAT= 78.0	U=	.025	/ 5.3	V=	.026	/ 8.4	W=	.000002	/ 10.7	T=	0.000	/ 8.1

Z= 30.985 KM

LAT= 0.0	U=	.097	/ 6.0	V=	0.000	/ 3.0	W=	.000325	/ 2.5	T=	.075	/ 11.8
LAT= 6.0	U=	.099	/ 6.0	V=	.038	/ 9.3	W=	.000305	/ 2.5	T=	.072	/ 11.8
LAT= 12.0	U=	.102	/ 6.0	V=	.071	/ 9.3	W=	.000251	/ 2.6	T=	.064	/ 11.8
LAT= 18.0	U=	.106	/ 6.0	V=	.097	/ 9.2	W=	.000179	/ 2.9	T=	.052	/ 11.9
LAT= 24.0	U=	.109	/ 5.9	V=	.112	/ 9.1	W=	.000111	/ 3.4	T=	.039	/ 12.0
LAT= 30.0	U=	.109	/ 5.9	V=	.119	/ 9.0	W=	.000067	/ 4.4	T=	.026	/ .1
LAT= 36.0	U=	.106	/ 5.8	V=	.118	/ 8.8	W=	.000055	/ 5.6	T=	.017	/ .3
LAT= 42.0	U=	.101	/ 5.7	V=	.111	/ 8.7	W=	.000052	/ 6.4	T=	.010	/ .5
LAT= 48.0	U=	.093	/ 5.6	V=	.101	/ 8.6	W=	.000044	/ 6.8	T=	.005	/ .8
LAT= 54.0	U=	.083	/ 5.5	V=	.089	/ 8.5	W=	.000031	/ 6.9	T=	.003	/ 1.1
LAT= 60.0	U=	.071	/ 5.4	V=	.075	/ 8.4	W=	.000020	/ 7.5	T=	.001	/ 2.7
LAT= 66.0	U=	.059	/ 5.4	V=	.060	/ 8.3	W=	.000010	/ 6.1	T=	.001	/ 1.6
LAT= 72.0	U=	.045	/ 5.3	V=	.045	/ 8.3	W=	.000006	/ 8.5	T=	0.000	/ 5.8
LAT= 78.0	U=	.029	/ 5.2	V=	.030	/ 8.3	W=	.000002	/ 5.6	T=	0.000	/ 4.3

Z= 36.378 KM

LAT= 0.0	U=	.146	/ 5.9	V=	0.000	/ 3.0	W=	.000374	/ 2.1	T=	.100	/ 11.6
LAT= 6.0	U=	.148	/ 5.9	V=	.062	/ 8.8	W=	.000352	/ 2.1	T=	.097	/ 11.6
LAT= 12.0	U=	.153	/ 5.9	V=	.115	/ 8.9	W=	.000296	/ 2.4	T=	.086	/ 11.7
LAT= 18.0	U=	.158	/ 5.9	V=	.154	/ 8.9	W=	.000230	/ 2.9	T=	.071	/ 11.9
LAT= 24.0	U=	.160	/ 5.9	V=	.174	/ 8.9	W=	.000185	/ 3.7	T=	.055	/ .1
LAT= 30.0	U=	.156	/ 5.9	V=	.177	/ 8.9	W=	.000169	/ 4.5	T=	.041	/ .4
LAT= 36.0	U=	.147	/ 5.9	V=	.167	/ 8.9	W=	.000162	/ 5.1	T=	.029	/ .8
LAT= 42.0	U=	.133	/ 5.9	V=	.149	/ 8.9	W=	.000144	/ 5.4	T=	.020	/ 1.1
LAT= 48.0	U=	.115	/ 5.9	V=	.128	/ 8.9	W=	.000114	/ 5.6	T=	.012	/ 1.5
LAT= 54.0	U=	.098	/ 5.9	V=	.105	/ 8.9	W=	.000080	/ 5.6	T=	.008	/ 1.8
LAT= 60.0	U=	.078	/ 5.9	V=	.085	/ 8.9	W=	.000046	/ 6.0	T=	.004	/ 2.5
LAT= 66.0	U=	.064	/ 5.9	V=	.065	/ 8.9	W=	.000029	/ 5.4	T=	.003	/ 2.0
LAT= 72.0	U=	.046	/ 5.9	V=	.047	/ 8.9	W=	.000010	/ 6.8	T=	.001	/ 4.2
LAT= 78.0	U=	.031	/ 5.9	V=	.031	/ 8.9	W=	.000011	/ 4.8	T=	.001	/ 2.1

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 41.789 KM														
LAT= 0.0	U=	.199	/	5.8	V=	0.000	/	3.0	W=	.000266	/	1.4	T=	.112 / 11.5
LAT= 6.0	U=	.202	/	5.8	V=	.083	/	8.5	W=	.000257	/	1.6	T=	.109 / 11.6
LAT= 12.0	U=	.208	/	5.8	V=	.155	/	8.6	W=	.000243	/	2.1	T=	.101 / 11.7
LAT= 18.0	U=	.214	/	5.8	V=	.206	/	8.6	W=	.000249	/	2.8	T=	.090 / 11.9
LAT= 24.0	U=	.217	/	5.9	V=	.235	/	8.7	W=	.000277	/	3.4	T=	.077 / .1
LAT= 30.0	U=	.213	/	5.9	V=	.241	/	8.8	W=	.000298	/	3.8	T=	.063 / .3
LAT= 36.0	U=	.203	/	6.0	V=	.231	/	9.0	W=	.000294	/	4.1	T=	.049 / .6
LAT= 42.0	U=	.186	/	6.1	V=	.210	/	9.1	W=	.000260	/	4.2	T=	.036 / .8
LAT= 48.0	U=	.166	/	6.3	V=	.184	/	9.3	W=	.000205	/	4.3	T=	.024 / 1.0
LAT= 54.0	U=	.145	/	6.4	V=	.155	/	9.4	W=	.000148	/	4.4	T=	.016 / 1.1
LAT= 60.0	U=	.118	/	6.5	V=	.128	/	9.5	W=	.000084	/	4.5	T=	.007 / 1.4
LAT= 66.0	U=	.099	/	6.6	V=	.100	/	9.6	W=	.000057	/	4.4	T=	.005 / 1.3
LAT= 72.0	U=	.071	/	6.6	V=	.073	/	9.6	W=	.000021	/	4.6	T=	.001 / 2.0
LAT= 78.0	U=	.048	/	6.7	V=	.048	/	9.6	W=	.000019	/	4.2	T=	.001 / 1.5
Z= 47.224 KM														
LAT= 0.0	U=	.250	/	5.8	V=	0.000	/	3.0	W=	.000147	/	10.0	T=	.110 / 11.6
LAT= 6.0	U=	.253	/	5.8	V=	.094	/	8.3	W=	.000108	/	10.4	T=	.109 / 11.7
LAT= 12.0	U=	.259	/	5.8	V=	.177	/	8.4	W=	.000076	/	1.2	T=	.108 / 11.7
LAT= 18.0	U=	.267	/	5.8	V=	.240	/	8.5	W=	.000211	/	2.6	T=	.104 / 11.8
LAT= 24.0	U=	.272	/	5.8	V=	.281	/	8.6	W=	.000358	/	2.9	T=	.097 / 12.0
LAT= 30.0	U=	.273	/	5.9	V=	.300	/	8.8	W=	.000455	/	3.0	T=	.086 / .1
LAT= 36.0	U=	.269	/	6.1	V=	.301	/	9.0	W=	.000482	/	3.1	T=	.071 / .1
LAT= 42.0	U=	.260	/	6.2	V=	.290	/	9.2	W=	.000442	/	3.2	T=	.055 / .2
LAT= 48.0	U=	.244	/	6.4	V=	.269	/	9.4	W=	.000357	/	3.2	T=	.038 / .3
LAT= 54.0	U=	.225	/	6.5	V=	.241	/	9.5	W=	.000260	/	3.3	T=	.025 / .3
LAT= 60.0	U=	.192	/	6.6	V=	.207	/	9.6	W=	.000156	/	3.3	T=	.012 / .4
LAT= 66.0	U=	.166	/	6.7	V=	.168	/	9.7	W=	.000099	/	3.4	T=	.008 / .5
LAT= 72.0	U=	.122	/	6.7	V=	.125	/	9.7	W=	.000053	/	3.4	T=	.003 / .4
LAT= 78.0	U=	.085	/	6.8	V=	.084	/	9.7	W=	.000020	/	3.2	T=	.001 / .4
Z= 52.691 KM														
LAT= 0.0	U=	.285	/	5.8	V=	0.000	/	3.0	W=	.000537	/	8.4	T=	.108 / 11.8
LAT= 6.0	U=	.288	/	5.8	V=	.089	/	8.3	W=	.000446	/	8.4	T=	.109 / 11.8
LAT= 12.0	U=	.294	/	5.8	V=	.171	/	8.4	W=	.000200	/	8.6	T=	.112 / 11.8
LAT= 18.0	U=	.304	/	5.8	V=	.241	/	8.5	W=	.000129	/	1.9	T=	.114 / 11.8
LAT= 24.0	U=	.316	/	5.8	V=	.297	/	8.6	W=	.000433	/	2.2	T=	.112 / 11.8
LAT= 30.0	U=	.328	/	5.9	V=	.339	/	8.8	W=	.000645	/	2.3	T=	.103 / 11.8
LAT= 36.0	U=	.339	/	6.0	V=	.366	/	9.0	W=	.000726	/	2.3	T=	.088 / 11.8
LAT= 42.0	U=	.345	/	6.1	V=	.378	/	9.1	W=	.000683	/	2.3	T=	.069 / 11.8
LAT= 48.0	U=	.340	/	6.2	V=	.372	/	9.2	W=	.000557	/	2.4	T=	.049 / 11.7
LAT= 54.0	U=	.327	/	6.3	V=	.350	/	9.3	W=	.000402	/	2.4	T=	.032 / 11.8
LAT= 60.0	U=	.291	/	6.4	V=	.312	/	9.4	W=	.000245	/	2.4	T=	.016 / 11.7
LAT= 66.0	U=	.257	/	6.4	V=	.261	/	9.4	W=	.000144	/	2.6	T=	.010 / 11.8
LAT= 72.0	U=	.195	/	6.4	V=	.199	/	9.4	W=	.000090	/	2.9	T=	.005 / 11.9
LAT= 78.0	U=	.138	/	6.4	V=	.134	/	9.4	W=	.000026	/	1.0	T=	.001 / 10.2

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 58.200 KM

LAT= 0.0	U=	.301	/ 5.8	V=	0.000	/ 3.1	W=	.001066	/ 8.0	T=	.107	/ .1
LAT= 6.0	U=	.305	/ 5.8	V=	.069	/ 8.4	W=	.000910	/ 8.1	T=	.110	/ 12.0
LAT= 12.0	U=	.313	/ 5.8	V=	.139	/ 8.5	W=	.000492	/ 8.2	T=	.118	/ 11.9
LAT= 18.0	U=	.328	/ 5.8	V=	.212	/ 8.6	W=	.000124	/ 11.9	T=	.125	/ 11.8
LAT= 24.0	U=	.351	/ 5.9	V=	.288	/ 8.7	W=	.000589	/ 1.5	T=	.129	/ 11.6
LAT= 30.0	U=	.382	/ 5.9	V=	.363	/ 8.8	W=	.000932	/ 1.6	T=	.123	/ 11.5
LAT= 36.0	U=	.416	/ 5.9	V=	.430	/ 8.9	W=	.001057	/ 1.6	T=	.109	/ 11.5
LAT= 42.0	U=	.448	/ 6.0	V=	.479	/ 9.0	W=	.000983	/ 1.6	T=	.087	/ 11.4
LAT= 48.0	U=	.465	/ 6.0	V=	.503	/ 9.0	W=	.000782	/ 1.6	T=	.063	/ 11.3
LAT= 54.0	U=	.466	/ 6.0	V=	.496	/ 9.0	W=	.000543	/ 1.6	T=	.042	/ 11.3
LAT= 60.0	U=	.429	/ 6.0	V=	.458	/ 9.0	W=	.000320	/ 1.6	T=	.022	/ 11.2
LAT= 66.0	U=	.385	/ 6.1	V=	.392	/ 9.0	W=	.000171	/ 1.6	T=	.012	/ 11.4
LAT= 72.0	U=	.304	/ 6.0	V=	.304	/ 9.0	W=	.000105	/ 2.3	T=	.007	/ 11.6
LAT= 78.0	U=	.207	/ 6.0	V=	.208	/ 9.1	W=	.000059	/ 11.1	T=	.002	/ 8.4

Z= 63.765 KM

LAT= 0.0	U=	.315	/ 5.8	V=	0.000	/ 3.3	W=	.001654	/ 7.8	T=	.107	/ .4
LAT= 6.0	U=	.319	/ 5.8	V=	.044	/ 8.6	W=	.001407	/ 7.8	T=	.111	/ .3
LAT= 12.0	U=	.329	/ 5.8	V=	.101	/ 8.7	W=	.000759	/ 8.0	T=	.124	/ 12.0
LAT= 18.0	U=	.352	/ 5.8	V=	.181	/ 8.8	W=	.000247	/ 11.4	T=	.141	/ 11.7
LAT= 24.0	U=	.392	/ 5.9	V=	.285	/ 8.9	W=	.000889	/ 1.0	T=	.152	/ 11.5
LAT= 30.0	U=	.447	/ 5.9	V=	.402	/ 8.9	W=	.001343	/ 1.1	T=	.152	/ 11.3
LAT= 36.0	U=	.511	/ 5.9	V=	.515	/ 8.9	W=	.001460	/ 1.1	T=	.137	/ 11.2
LAT= 42.0	U=	.570	/ 5.8	V=	.604	/ 8.8	W=	.001296	/ 1.0	T=	.111	/ 11.1
LAT= 48.0	U=	.607	/ 5.8	V=	.653	/ 8.8	W=	.000978	/ .9	T=	.080	/ 11.0
LAT= 54.0	U=	.616	/ 5.8	V=	.653	/ 8.8	W=	.000636	/ .8	T=	.052	/ 10.9
LAT= 60.0	U=	.573	/ 5.7	V=	.608	/ 8.7	W=	.000351	/ .5	T=	.027	/ 10.7
LAT= 66.0	U=	.513	/ 5.7	V=	.521	/ 8.7	W=	.000169	/ .3	T=	.015	/ 10.9
LAT= 72.0	U=	.408	/ 5.7	V=	.405	/ 8.7	W=	.000078	/ 1.7	T=	.009	/ 11.4
LAT= 78.0	U=	.268	/ 5.6	V=	.276	/ 8.7	W=	.000128	/ 10.0	T=	.006	/ 7.4

Z= 69.403 KM

LAT= 0.0	U=	.336	/ 6.0	V=	0.000	/ 3.7	W=	.002105	/ 7.4	T=	.127	/ 1.0
LAT= 6.0	U=	.340	/ 6.0	V=	.049	/ 11.7	W=	.001762	/ 7.4	T=	.128	/ .7
LAT= 12.0	U=	.354	/ 6.0	V=	.095	/ 10.9	W=	.000894	/ 7.8	T=	.137	/ .1
LAT= 18.0	U=	.390	/ 5.9	V=	.174	/ 9.9	W=	.000495	/ 11.3	T=	.161	/ 11.5
LAT= 24.0	U=	.455	/ 5.8	V=	.311	/ 9.3	W=	.001310	/ .3	T=	.184	/ 11.1
LAT= 30.0	U=	.546	/ 5.7	V=	.483	/ 8.9	W=	.001804	/ .4	T=	.190	/ 10.9
LAT= 36.0	U=	.646	/ 5.6	V=	.650	/ 8.7	W=	.001841	/ .4	T=	.173	/ 10.7
LAT= 42.0	U=	.733	/ 5.5	V=	.776	/ 8.5	W=	.001541	/ .2	T=	.139	/ 10.6
LAT= 48.0	U=	.780	/ 5.4	V=	.838	/ 8.4	W=	.001097	/ 12.0	T=	.099	/ 10.4
LAT= 54.0	U=	.782	/ 5.3	V=	.828	/ 8.3	W=	.000677	/ 11.7	T=	.062	/ 10.4
LAT= 60.0	U=	.717	/ 5.3	V=	.757	/ 8.3	W=	.000375	/ 11.1	T=	.032	/ 10.1
LAT= 66.0	U=	.628	/ 5.2	V=	.638	/ 8.2	W=	.000193	/ 10.5	T=	.016	/ 10.3
LAT= 72.0	U=	.492	/ 5.2	V=	.488	/ 8.2	W=	.000014	/ 9.8	T=	.009	/ 11.3
LAT= 78.0	U=	.319	/ 5.0	V=	.329	/ 8.2	W=	.000204	/ 9.4	T=	.010	/ 7.0

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 75.140 KM

LAT= 0.0	U=	.391 /	6.4	V=	0.000 /	4.4	W=	.001954 /	6.5	T=	.209 /	1.3
LAT= 6.0	U=	.396 /	6.4	V=	.235 /	.2	W=	.001593 /	6.6	T=	.196 /	1.0
LAT= 12.0	U=	.412 /	6.3	V=	.374 /	12.0	W=	.000721 /	7.4	T=	.174 /	.3
LAT= 18.0	U=	.457 /	6.1	V=	.389 /	11.3	W=	.000804 /	10.8	T=	.183 /	11.3
LAT= 24.0	U=	.549 /	5.8	V=	.404 /	10.0	W=	.001722 /	11.3	T=	.216 /	10.6
LAT= 30.0	U=	.699 /	5.4	V=	.592 /	8.9	W=	.002253 /	11.4	T=	.235 /	10.2
LAT= 36.0	U=	.879 /	5.2	V=	.866 /	8.3	W=	.002294 /	11.2	T=	.223 /	9.9
LAT= 42.0	U=	1.038 /	5.0	V=	1.091 /	8.0	W=	.001970 /	11.0	T=	.186 /	9.7
LAT= 48.0	U=	1.127 /	4.8	V=	1.205 /	7.9	W=	.001481 /	10.7	T=	.136 /	9.6
LAT= 54.0	U=	1.131 /	4.8	V=	1.195 /	7.8	W=	.000993 /	10.4	T=	.087 /	9.5
LAT= 60.0	U=	1.032 /	4.7	V=	1.085 /	7.7	W=	.000627 /	9.9	T=	.048 /	9.2
LAT= 66.0	U=	.890 /	4.7	V=	.904 /	7.7	W=	.000331 /	9.5	T=	.024 /	9.5
LAT= 72.0	U=	.690 /	4.7	V=	.684 /	7.6	W=	.000127 /	8.7	T=	.010 /	10.4
LAT= 78.0	U=	.441 /	4.5	V=	.456 /	7.7	W=	.000222 /	8.9	T=	.014 /	6.8

Z= 81.010 KM

LAT= 0.0	U=	.544 /	6.6	V=	0.000 /	4.6	W=	.002069 /	3.6	T=	.404 /	.6
LAT= 6.0	U=	.551 /	6.6	V=	.490 /	.1	W=	.001597 /	3.6	T=	.369 /	.5
LAT= 12.0	U=	.568 /	6.6	V=	.793 /	11.9	W=	.000360 /	3.2	T=	.279 /	.1
LAT= 18.0	U=	.606 /	6.3	V=	.823 /	11.5	W=	.001256 /	9.8	T=	.192 /	11.1
LAT= 24.0	U=	.705 /	5.8	V=	.687 /	10.5	W=	.002704 /	9.7	T=	.186 /	9.7
LAT= 30.0	U=	.917 /	5.2	V=	.771 /	8.5	W=	.003611 /	9.6	T=	.228 /	8.9
LAT= 36.0	U=	1.217 /	4.8	V=	1.169 /	8.0	W=	.003823 /	9.5	T=	.248 /	8.5
LAT= 42.0	U=	1.512 /	4.5	V=	1.573 /	7.5	W=	.003430 /	9.4	T=	.228 /	8.3
LAT= 48.0	U=	1.707 /	4.3	V=	1.818 /	7.3	W=	.002679 /	9.3	T=	.181 /	8.2
LAT= 54.0	U=	1.761 /	4.2	V=	1.859 /	7.2	W=	.001828 /	9.1	T=	.123 /	8.2
LAT= 60.0	U=	1.648 /	4.0	V=	1.724 /	7.1	W=	.001143 /	8.9	T=	.077 /	8.1
LAT= 66.0	U=	1.434 /	4.0	V=	1.457 /	7.0	W=	.000531 /	8.7	T=	.039 /	8.7
LAT= 72.0	U=	1.129 /	4.0	V=	1.114 /	6.9	W=	.000366 /	8.7	T=	.022 /	8.4
LAT= 78.0	U=	.725 /	3.7	V=	.748 /	7.0	W=	.000137 /	6.7	T=	.007 /	6.5

Z= 87.062 KM

LAT= 0.0	U=	.909 /	6.2	V=	0.000 /	3.6	W=	.006778 /	1.9	T=	.944 /	11.4
LAT= 6.0	U=	.922 /	6.2	V=	.592 /	10.7	W=	.005538 /	1.8	T=	.832 /	11.4
LAT= 12.0	U=	.946 /	6.2	V=	1.021 /	10.6	W=	.002433 /	1.2	T=	.537 /	11.3
LAT= 18.0	U=	.968 /	6.1	V=	1.199 /	10.3	W=	.002037 /	9.2	T=	.171 /	10.8
LAT= 24.0	U=	.987 /	5.7	V=	1.164 /	9.7	W=	.005675 /	8.4	T=	.180 /	6.0
LAT= 30.0	U=	1.047 /	5.2	V=	1.103 /	8.9	W=	.007711 /	8.2	T=	.388 /	5.6
LAT= 36.0	U=	1.198 /	4.6	V=	1.225 /	7.9	W=	.008080 /	8.0	T=	.458 /	5.4
LAT= 42.0	U=	1.413 /	4.1	V=	1.487 /	7.2	W=	.007140 /	7.9	T=	.418 /	5.3
LAT= 48.0	U=	1.598 /	3.8	V=	1.707 /	6.8	W=	.005528 /	7.7	T=	.322 /	5.1
LAT= 54.0	U=	1.681 /	3.6	V=	1.778 /	6.6	W=	.003801 /	7.4	T=	.207 /	4.8
LAT= 60.0	U=	1.609 /	3.4	V=	1.682 /	6.4	W=	.002418 /	7.1	T=	.131 /	4.6
LAT= 66.0	U=	1.429 /	3.4	V=	1.445 /	6.4	W=	.001220 /	6.7	T=	.046 /	3.7
LAT= 72.0	U=	1.136 /	3.3	V=	1.120 /	6.3	W=	.000784 /	7.7	T=	.043 /	5.4
LAT= 78.0	U=	.745 /	3.1	V=	.759 /	6.3	W=	.000795 /	4.6	T=	.052 /	1.6

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 93.363 KM

LAT= 0.0	U=	1.862	5.5	V=	0.000	3.0	W=	.013446	.4	T=	1.557	10.3
LAT= 6.0	U=	1.924	5.5	V=	1.815	8.5	W=	.011450	.3	T=	1.366	10.4
LAT= 12.0	U=	2.017	5.5	V=	3.042	8.5	W=	.006195	12.0	T=	.860	10.5
LAT= 18.0	U=	1.950	5.5	V=	3.345	8.5	W=	.002298	8.5	T=	.236	11.5
LAT= 24.0	U=	1.569	5.5	V=	2.762	8.5	W=	.008216	7.0	T=	.490	3.5
LAT= 30.0	U=	.883	5.6	V=	1.628	8.5	W=	.012926	6.8	T=	.934	3.7
LAT= 36.0	U=	.061	6.1	V=	.389	8.5	W=	.014960	6.7	T=	1.141	3.8
LAT= 42.0	U=	.674	11.5	V=	.597	2.5	W=	.014407	6.7	T=	1.120	3.8
LAT= 48.0	U=	1.150	11.5	V=	1.160	2.5	W=	.012037	6.6	T=	.943	3.8
LAT= 54.0	U=	1.281	11.4	V=	1.320	2.5	W=	.008834	6.6	T=	.689	3.7
LAT= 60.0	U=	1.246	11.4	V=	1.189	2.4	W=	.005784	6.6	T=	.458	3.8
LAT= 66.0	U=	.858	11.3	V=	.936	2.3	W=	.003113	6.6	T=	.230	3.6
LAT= 72.0	U=	.739	11.2	V=	.654	2.1	W=	.001947	7.4	T=	.159	4.5
LAT= 78.0	U=	.371	10.5	V=	.357	2.0	W=	.001181	4.9	T=	.095	1.9

Z= 96.638 KM

LAT= 0.0	U=	2.365	5.2	V=	0.000	6.8	W=	.016344	11.7	T=	1.788	9.9
LAT= 6.0	U=	2.427	5.2	V=	2.271	8.1	W=	.014154	11.7	T=	1.561	9.9
LAT= 12.0	U=	2.514	5.2	V=	3.847	8.1	W=	.008238	11.5	T=	.960	10.1
LAT= 18.0	U=	2.406	5.3	V=	4.303	8.1	W=	.001608	8.9	T=	.251	11.5
LAT= 24.0	U=	1.916	5.3	V=	3.630	8.1	W=	.008322	6.4	T=	.632	3.0
LAT= 30.0	U=	1.042	5.6	V=	2.179	8.2	W=	.014527	6.2	T=	1.128	3.3
LAT= 36.0	U=	.361	8.7	V=	.537	9.1	W=	.017795	6.3	T=	1.329	3.4
LAT= 42.0	U=	1.282	10.4	V=	1.129	1.3	W=	.017925	6.3	T=	1.256	3.5
LAT= 48.0	U=	2.083	10.5	V=	2.129	1.5	W=	.015584	6.4	T=	1.009	3.5
LAT= 54.0	U=	2.471	10.5	V=	2.588	1.5	W=	.011869	6.5	T=	.696	3.6
LAT= 60.0	U=	2.536	10.5	V=	2.570	1.4	W=	.008026	6.7	T=	.427	3.7
LAT= 66.0	U=	2.148	10.3	V=	2.246	1.3	W=	.004573	6.9	T=	.199	3.7
LAT= 72.0	U=	1.810	10.4	V=	1.742	1.2	W=	.003054	7.5	T=	.147	4.9
LAT= 78.0	U=	1.203	9.7	V=	1.129	1.2	W=	.001178	5.7	T=	.075	2.0

Z= 100.017 KM

LAT= 0.0	U=	2.935	5.1	V=	0.000	7.2	W=	.023065	10.8	T=	2.057	9.1
LAT= 6.0	U=	3.006	5.1	V=	2.972	7.8	W=	.020009	10.9	T=	1.783	9.2
LAT= 12.0	U=	3.100	5.1	V=	5.088	7.8	W=	.011756	10.9	T=	1.093	9.5
LAT= 18.0	U=	2.945	5.1	V=	5.778	7.9	W=	.000743	10.5	T=	.347	11.4
LAT= 24.0	U=	2.279	5.2	V=	4.925	7.9	W=	.010128	5.1	T=	.904	2.2
LAT= 30.0	U=	1.068	5.7	V=	2.877	8.1	W=	.018279	5.3	T=	1.535	2.6
LAT= 36.0	U=	.995	9.6	V=	.735	10.4	W=	.022415	5.4	T=	1.811	2.7
LAT= 42.0	U=	2.754	10.3	V=	2.631	1.1	W=	.022540	5.7	T=	1.731	2.8
LAT= 48.0	U=	4.328	10.4	V=	4.589	1.3	W=	.019666	5.9	T=	1.405	3.0
LAT= 54.0	U=	5.302	10.4	V=	5.687	1.4	W=	.015172	6.2	T=	.980	3.1
LAT= 60.0	U=	5.634	10.4	V=	5.868	1.4	W=	.010538	6.5	T=	.599	3.3
LAT= 66.0	U=	5.096	10.4	V=	5.322	1.4	W=	.006251	6.8	T=	.278	3.5
LAT= 72.0	U=	4.349	10.5	V=	4.257	1.4	W=	.004389	7.3	T=	.204	4.4
LAT= 78.0	U=	2.905	10.3	V=	2.888	1.4	W=	.001465	6.6	T=	.066	2.5

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 103.521 KM

LAT= 0.0	U=	3.634	/ 4.4	V=	0.000	/ 8.2	W=	.032134	/ 9.9	T=	2.840	/ 8.0
LAT= 6.0	U=	3.682	/ 4.4	V=	4.155	/ 6.6	W=	.027897	/ 10.0	T=	2.437	/ 8.1
LAT= 12.0	U=	3.704	/ 4.4	V=	7.120	/ 6.7	W=	.016571	/ 10.1	T=	1.389	/ 8.5
LAT= 18.0	U=	3.412	/ 4.4	V=	8.089	/ 6.8	W=	.002746	/ 11.9	T=	.592	/ 11.3
LAT= 24.0	U=	2.587	/ 4.9	V=	6.904	/ 7.1	W=	.013002	/ 3.7	T=	1.612	/ 1.1
LAT= 30.0	U=	1.893	/ 6.5	V=	4.291	/ 7.8	W=	.022929	/ 4.0	T=	2.477	/ 1.5
LAT= 36.0	U=	3.414	/ 8.3	V=	3.330	/ 10.1	W=	.027194	/ 4.3	T=	2.782	/ 1.7
LAT= 42.0	U=	6.074	/ 8.8	V=	6.265	/ 11.5	W=	.026280	/ 4.6	T=	2.569	/ 1.9
LAT= 48.0	U=	8.576	/ 9.0	V=	9.307	/ 11.9	W=	.022090	/ 4.9	T=	2.033	/ 2.2
LAT= 54.0	U=	10.257	/ 9.2	V=	11.132	/ .1	W=	.016641	/ 5.4	T=	1.402	/ 2.5
LAT= 60.0	U=	10.806	/ 9.3	V=	11.470	/ .3	W=	.011685	/ 5.8	T=	.872	/ 3.0
LAT= 66.0	U=	10.035	/ 9.4	V=	10.485	/ .4	W=	.007117	/ 6.4	T=	.440	/ 3.6
LAT= 72.0	U=	8.408	/ 9.6	V=	8.483	/ .5	W=	.005509	/ 7.0	T=	.395	/ 4.5
LAT= 78.0	U=	6.088	/ 9.5	V=	5.818	/ .6	W=	.001617	/ 6.2	T=	.099	/ 2.7

Z= 107.177 KM

LAT= 0.0	U=	3.931	/ 3.6	V=	0.000	/ 9.4	W=	.038878	/ 8.9	T=	3.781	/ 6.7
LAT= 6.0	U=	3.929	/ 3.6	V=	4.909	/ 5.4	W=	.034073	/ 8.9	T=	3.259	/ 6.7
LAT= 12.0	U=	3.843	/ 3.6	V=	8.406	/ 5.5	W=	.021399	/ 9.2	T=	1.920	/ 7.2
LAT= 18.0	U=	3.483	/ 3.8	V=	9.571	/ 5.7	W=	.007538	/ 10.9	T=	.983	/ 9.7
LAT= 24.0	U=	2.891	/ 4.5	V=	8.358	/ 6.1	W=	.014747	/ 1.9	T=	2.224	/ 11.6
LAT= 30.0	U=	3.244	/ 5.9	V=	6.080	/ 7.1	W=	.025055	/ 2.5	T=	3.352	/ 12.0
LAT= 36.0	U=	5.514	/ 7.0	V=	6.230	/ 8.9	W=	.029057	/ 2.8	T=	3.765	/ .3
LAT= 42.0	U=	8.612	/ 7.4	V=	9.506	/ 9.9	W=	.027086	/ 3.1	T=	3.508	/ .6
LAT= 48.0	U=	11.471	/ 7.7	V=	12.838	/ 10.5	W=	.021629	/ 3.5	T=	2.846	/ 1.0
LAT= 54.0	U=	13.414	/ 7.8	V=	14.809	/ 10.8	W=	.015361	/ 4.1	T=	2.089	/ 1.5
LAT= 60.0	U=	13.949	/ 8.0	V=	15.075	/ 11.0	W=	.010628	/ 4.7	T=	1.463	/ 2.1
LAT= 66.0	U=	13.056	/ 8.1	V=	13.760	/ 11.2	W=	.006355	/ 5.5	T=	.878	/ 2.7
LAT= 72.0	U=	10.945	/ 8.2	V=	11.165	/ 11.3	W=	.005868	/ 6.0	T=	.822	/ 3.3
LAT= 78.0	U=	8.105	/ 8.3	V=	7.677	/ 11.4	W=	.000695	/ 5.3	T=	.132	/ 2.1

Z= 111.019 KM

LAT= 0.0	U=	3.686	/ 2.8	V=	.001	/ 8.7	W=	.042605	/ 7.9	T=	4.940	/ 5.3
LAT= 6.0	U=	3.622	/ 2.7	V=	4.791	/ 4.2	W=	.037736	/ 7.9	T=	4.332	/ 5.4
LAT= 12.0	U=	3.411	/ 2.8	V=	8.284	/ 4.3	W=	.025216	/ 8.3	T=	2.802	/ 5.9
LAT= 18.0	U=	3.021	/ 3.0	V=	9.647	/ 4.5	W=	.013265	/ 9.9	T=	1.689	/ 7.8
LAT= 24.0	U=	2.721	/ 3.8	V=	8.892	/ 5.0	W=	.018346	/ .1	T=	2.837	/ 9.7
LAT= 30.0	U=	3.519	/ 5.0	V=	7.280	/ 5.9	W=	.027834	/ .8	T=	4.186	/ 10.3
LAT= 36.0	U=	5.730	/ 5.7	V=	7.438	/ 7.3	W=	.031522	/ 1.2	T=	4.771	/ 10.7
LAT= 42.0	U=	8.536	/ 6.1	V=	10.009	/ 8.4	W=	.028962	/ 1.5	T=	4.565	/ 11.0
LAT= 48.0	U=	11.105	/ 6.4	V=	12.836	/ 9.0	W=	.022535	/ 1.9	T=	3.848	/ 11.5
LAT= 54.0	U=	12.901	/ 6.6	V=	14.540	/ 9.4	W=	.015142	/ 2.4	T=	2.977	/ 12.0
LAT= 60.0	U=	13.360	/ 6.8	V=	14.729	/ 9.7	W=	.009695	/ 3.1	T=	2.217	/ .5
LAT= 66.0	U=	12.631	/ 6.9	V=	13.457	/ 9.9	W=	.004990	/ 3.8	T=	1.406	/ 1.0
LAT= 72.0	U=	10.766	/ 7.3	V=	10.971	/ 10.1	W=	.005569	/ 4.4	T=	1.270	/ 1.5
LAT= 78.0	U=	7.893	/ 7.1	V=	7.600	/ 10.3	W=	.000696	/ 12.0	T=	.174	/ .3

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 115.091 KM

LAT= 0.0	U=	3.055 /	1.9	V=	.001 /	7.9	W=	.043475 /	6.9	T=	5.756 /	4.0
LAT= 6.0	U=	2.947 /	1.9	V=	4.248 /	3.0	W=	.038782 /	7.0	T=	5.111 /	4.2
LAT= 12.0	U=	2.650 /	1.9	V=	7.436 /	3.2	W=	.027116 /	7.5	T=	3.539 /	4.8
LAT= 18.0	U=	2.258 /	2.3	V=	8.882 /	3.4	W=	.017797 /	9.0	T=	2.514 /	6.4
LAT= 24.0	U=	2.167 /	3.2	V=	8.587 /	3.9	W=	.023343 /	10.8	T=	3.615 /	8.0
LAT= 30.0	U=	3.087 /	4.2	V=	7.471 /	4.7	W=	.032614 /	11.5	T=	5.071 /	8.7
LAT= 36.0	U=	4.953 /	4.7	V=	7.320 /	5.9	W=	.036591 /	11.9	T=	5.793 /	9.1
LAT= 42.0	U=	7.204 /	5.0	V=	8.919 /	6.9	W=	.034287 /	.2	T=	5.664 /	9.5
LAT= 48.0	U=	9.269 /	5.3	V=	10.991 /	7.6	W=	.027643 /	.5	T=	4.931 /	9.9
LAT= 54.0	U=	10.793 /	5.5	V=	12.330 /	8.1	W=	.019538 /	.8	T=	3.960 /	10.3
LAT= 60.0	U=	11.210 /	5.7	V=	12.507 /	8.5	W=	.012627 /	1.4	T=	3.007 /	10.8
LAT= 66.0	U=	10.753 /	5.8	V=	11.498 /	8.8	W=	.006294 /	1.8	T=	1.933 /	11.1
LAT= 72.0	U=	9.330 /	6.2	V=	9.489 /	9.0	W=	.006670 /	2.6	T=	1.660 /	11.6
LAT= 78.0	U=	6.804 /	6.0	V=	6.694 /	9.2	W=	.001685 /	11.3	T=	.310 /	10.5

Z= 119.451 KM

LAT= 0.0	U=	2.347 /	1.1	V=	.001 /	7.2	W=	.042621 /	6.1	T=	5.739 /	3.0
LAT= 6.0	U=	2.224 /	1.1	V=	3.611 /	2.0	W=	.038124 /	6.3	T=	5.124 /	3.2
LAT= 12.0	U=	1.914 /	1.2	V=	6.386 /	2.2	W=	.027365 /	6.8	T=	3.687 /	3.9
LAT= 18.0	U=	1.591 /	1.7	V=	7.781 /	2.4	W=	.020763 /	8.4	T=	2.983 /	5.5
LAT= 24.0	U=	1.699 /	2.7	V=	7.778 /	2.9	W=	.028306 /	9.8	T=	4.217 /	6.8
LAT= 30.0	U=	2.626 /	3.5	V=	7.027 /	3.6	W=	.038591 /	10.5	T=	5.755 /	7.5
LAT= 36.0	U=	4.163 /	3.9	V=	6.753 /	4.7	W=	.043638 /	10.8	T=	6.602 /	7.9
LAT= 42.0	U=	5.965 /	4.1	V=	7.701 /	5.7	W=	.042185 /	11.1	T=	6.602 /	8.3
LAT= 48.0	U=	7.644 /	4.3	V=	9.187 /	6.4	W=	.035752 /	11.5	T=	5.938 /	8.6
LAT= 54.0	U=	8.972 /	4.5	V=	10.254 /	7.0	W=	.027287 /	11.8	T=	4.965 /	9.0
LAT= 60.0	U=	9.387 /	4.7	V=	10.461 /	7.4	W=	.018984 /	.2	T=	3.857 /	9.4
LAT= 66.0	U=	9.137 /	4.8	V=	9.721 /	7.7	W=	.010672 /	.5	T=	2.539 /	9.6
LAT= 72.0	U=	8.020 /	5.2	V=	8.160 /	8.0	W=	.009851 /	1.2	T=	2.066 /	10.1
LAT= 78.0	U=	5.846 /	5.0	V=	5.889 /	8.3	W=	.002394 /	10.8	T=	.483 /	9.3

Z= 124.175 KM

LAT= 0.0	U=	1.749 /	.3	V=	.001 /	6.6	W=	.040992 /	5.4	T=	5.048 /	2.2
LAT= 6.0	U=	1.630 /	.4	V=	3.027 /	1.2	W=	.036606 /	5.5	T=	4.505 /	2.4
LAT= 12.0	U=	1.349 /	.6	V=	5.395 /	1.3	W=	.026504 /	6.2	T=	3.296 /	3.2
LAT= 18.0	U=	1.140 /	1.3	V=	6.675 /	1.6	W=	.022445 /	7.8	T=	2.974 /	4.8
LAT= 24.0	U=	1.420 /	2.3	V=	6.847 /	2.0	W=	.032626 /	9.1	T=	4.378 /	6.0
LAT= 30.0	U=	2.314 /	2.9	V=	6.392 /	2.7	W=	.044731 /	9.7	T=	5.979 /	6.6
LAT= 36.0	U=	3.630 /	3.1	V=	6.194 /	3.6	W=	.051426 /	10.1	T=	6.949 /	7.0
LAT= 42.0	U=	5.149 /	3.3	V=	6.845 /	4.6	W=	.051264 /	10.4	T=	7.120 /	7.4
LAT= 48.0	U=	6.587 /	3.4	V=	7.964 /	5.4	W=	.045401 /	10.7	T=	6.601 /	7.7
LAT= 54.0	U=	7.786 /	3.6	V=	8.827 /	6.0	W=	.036919 /	11.0	T=	5.726 /	8.0
LAT= 60.0	U=	8.184 /	3.8	V=	9.028 /	6.4	W=	.027465 /	11.4	T=	4.561 /	8.4
LAT= 66.0	U=	8.015 /	3.9	V=	8.458 /	6.8	W=	.016984 /	11.6	T=	3.091 /	8.5
LAT= 72.0	U=	7.055 /	4.4	V=	7.196 /	7.1	W=	.014721 /	.3	T=	2.428 /	9.0
LAT= 78.0	U=	5.131 /	4.1	V=	5.291 /	7.4	W=	.003028 /	10.5	T=	.634 /	8.5

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 129.367 KM

LAT= 0.0	U=	1.271	/	11.7	V=	0.000	/	5.9	W=	.038901	/	4.6	T=	4.097 / 1.6
LAT= 6.0	U=	1.163	/	11.8	V=	2.543	/	.3	W=	.034556	/	4.8	T=	3.635 / 1.8
LAT= 12.0	U=	.930	/	.2	V=	4.550	/	.5	W=	.024832	/	5.6	T=	2.650 / 2.6
LAT= 18.0	U=	.855	/	1.1	V=	5.677	/	.8	W=	.022968	/	7.3	T=	2.657 / 4.4
LAT= 24.0	U=	1.268	/	1.9	V=	5.917	/	1.2	W=	.035840	/	8.5	T=	4.180 / 5.5
LAT= 30.0	U=	2.138	/	2.2	V=	5.664	/	1.9	W=	.050121	/	9.1	T=	5.816 / 6.0
LAT= 36.0	U=	3.344	/	2.3	V=	5.609	/	2.8	W=	.058889	/	9.4	T=	6.899 / 6.4
LAT= 42.0	U=	4.720	/	2.5	V=	6.192	/	3.7	W=	.060491	/	9.8	T=	7.254 / 6.7
LAT= 48.0	U=	6.024	/	2.6	V=	7.140	/	4.5	W=	.055674	/	10.1	T=	6.919 / 7.0
LAT= 54.0	U=	7.150	/	2.8	V=	7.894	/	5.1	W=	.047606	/	10.4	T=	6.195 / 7.3
LAT= 60.0	U=	7.527	/	3.0	V=	8.103	/	5.5	W=	.037278	/	10.8	T=	5.052 / 7.6
LAT= 66.0	U=	7.361	/	3.1	V=	7.656	/	5.9	W=	.024603	/	11.0	T=	3.523 / 7.7
LAT= 72.0	U=	6.475	/	3.5	V=	6.596	/	6.3	W=	.020684	/	11.6	T=	2.714 / 8.2
LAT= 78.0	U=	4.674	/	3.3	V=	4.935	/	6.5	W=	.003813	/	10.4	T=	.755 / 7.9

Z= 135.169 KM

LAT= 0.0	U=	.887	/	11.2	V=	0.000	/	5.3	W=	.036579	/	3.9	T=	3.176 / .9
LAT= 6.0	U=	.797	/	11.3	V=	2.149	/	11.6	W=	.032231	/	4.1	T=	2.781 / 1.1
LAT= 12.0	U=	.634	/	11.9	V=	3.850	/	11.7	W=	.022621	/	5.0	T=	1.965 / 2.1
LAT= 18.0	U=	.717	/	1.0	V=	4.820	/	12.0	W=	.022515	/	6.9	T=	2.223 / 4.0
LAT= 24.0	U=	1.231	/	1.6	V=	5.061	/	.5	W=	.037809	/	8.0	T=	3.807 / 5.0
LAT= 30.0	U=	2.108	/	1.7	V=	4.924	/	1.2	W=	.054238	/	8.5	T=	5.450 / 5.5
LAT= 36.0	U=	3.290	/	1.7	V=	4.994	/	2.1	W=	.065214	/	8.9	T=	6.625 / 5.9
LAT= 42.0	U=	4.619	/	1.8	V=	5.610	/	3.0	W=	.068845	/	9.2	T=	7.151 / 6.1
LAT= 48.0	U=	5.862	/	1.9	V=	6.531	/	3.7	W=	.065418	/	9.6	T=	6.998 / 6.4
LAT= 54.0	U=	6.961	/	2.1	V=	7.291	/	4.3	W=	.058093	/	9.9	T=	6.435 / 6.7
LAT= 60.0	U=	7.326	/	2.2	V=	7.575	/	4.7	W=	.047172	/	10.3	T=	5.357 / 7.0
LAT= 66.0	U=	7.126	/	2.3	V=	7.258	/	5.1	W=	.032542	/	10.5	T=	3.831 / 7.1
LAT= 72.0	U=	6.276	/	2.7	V=	6.353	/	5.5	W=	.026854	/	11.0	T=	2.920 / 7.5
LAT= 78.0	U=	4.465	/	2.5	V=	4.843	/	5.7	W=	.004888	/	10.2	T=	.850 / 7.3

Z= 141.772 KM

LAT= 0.0	U=	.582	/	10.8	V=	0.000	/	4.6	W=	.034479	/	3.2	T=	2.421 / .1
LAT= 6.0	U=	.520	/	11.1	V=	1.831	/	10.8	W=	.030069	/	3.4	T=	2.070 / .4
LAT= 12.0	U=	.465	/	12.0	V=	3.280	/	11.0	W=	.020241	/	4.3	T=	1.340 / 1.5
LAT= 18.0	U=	.708	/	1.0	V=	4.103	/	11.2	W=	.021380	/	6.4	T=	1.775 / 3.8
LAT= 24.0	U=	1.294	/	1.2	V=	4.307	/	11.7	W=	.038737	/	7.6	T=	3.378 / 4.7
LAT= 30.0	U=	2.197	/	1.2	V=	4.210	/	.5	W=	.057082	/	8.0	T=	5.004 / 5.1
LAT= 36.0	U=	3.387	/	1.2	V=	4.353	/	1.4	W=	.070159	/	8.4	T=	6.245 / 5.4
LAT= 42.0	U=	4.699	/	1.2	V=	5.035	/	2.3	W=	.075861	/	8.7	T=	6.915 / 5.7
LAT= 48.0	U=	5.907	/	1.3	V=	6.013	/	3.0	W=	.073986	/	9.1	T=	6.927 / 5.9
LAT= 54.0	U=	7.001	/	1.4	V=	6.866	/	3.6	W=	.067577	/	9.4	T=	6.514 / 6.2
LAT= 60.0	U=	7.366	/	1.6	V=	7.284	/	4.0	W=	.056279	/	9.8	T=	5.522 / 6.5
LAT= 66.0	U=	7.143	/	1.6	V=	7.122	/	4.4	W=	.040088	/	10.0	T=	4.039 / 6.5
LAT= 72.0	U=	6.313	/	2.0	V=	6.359	/	4.7	W=	.032675	/	10.5	T=	3.061 / 6.9
LAT= 78.0	U=	4.429	/	1.8	V=	4.946	/	5.0	W=	.006378	/	9.9	T=	.930 / 6.7

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 149.425 KM

LAT= 0.0	U=	.360	10.9	V=	0.000	3.9	W=	.033166	2.5	T=	1.901	11.2
LAT= 6.0	U=	.347	11.3	V=	1.571	10.1	W=	.028592	2.6	T=	1.574	11.4
LAT= 12.0	U=	.437	.3	V=	2.812	10.2	W=	.018100	3.6	T=	.826	.7
LAT= 18.0	U=	.790	.8	V=	3.510	10.5	W=	.019898	6.0	T=	1.353	3.6
LAT= 24.0	U=	1.417	.9	V=	3.658	11.0	W=	.039075	7.1	T=	2.937	4.3
LAT= 30.0	U=	2.335	.8	V=	3.543	11.7	W=	.059128	7.6	T=	4.522	4.7
LAT= 36.0	U=	3.514	.8	V=	3.698	.8	W=	.074142	7.9	T=	5.801	4.9
LAT= 42.0	U=	4.787	.8	V=	4.431	1.7	W=	.081875	8.2	T=	6.586	5.2
LAT= 48.0	U=	5.940	.8	V=	5.497	2.5	W=	.081637	8.6	T=	6.739	5.4
LAT= 54.0	U=	7.019	.9	V=	6.477	3.0	W=	.076240	8.9	T=	6.463	5.7
LAT= 60.0	U=	7.393	1.0	V=	7.051	3.4	W=	.064685	9.3	T=	5.568	5.9
LAT= 66.0	U=	7.176	1.0	V=	7.046	3.8	W=	.047256	9.5	T=	4.158	6.0
LAT= 72.0	U=	6.368	1.4	V=	6.413	4.1	W=	.038230	10.0	T=	3.142	6.4
LAT= 78.0	U=	4.440	1.2	V=	5.089	4.3	W=	.008437	9.6	T=	1.004	6.2

Z= 158.420 KM

LAT= 0.0	U=	.287	11.8	V=	0.000	3.1	W=	.032984	1.7	T=	1.651	10.2
LAT= 6.0	U=	.331	12.0	V=	1.362	9.3	W=	.028161	1.9	T=	1.343	10.3
LAT= 12.0	U=	.517	.4	V=	2.435	9.4	W=	.016586	2.8	T=	.513	11.2
LAT= 18.0	U=	.902	.5	V=	3.022	9.7	W=	.018283	5.5	T=	.979	3.5
LAT= 24.0	U=	1.522	.5	V=	3.099	10.2	W=	.039158	6.6	T=	2.508	4.0
LAT= 30.0	U=	2.404	.4	V=	2.910	11.0	W=	.060880	7.1	T=	4.032	4.3
LAT= 36.0	U=	3.523	.3	V=	3.002	.1	W=	.077840	7.4	T=	5.322	4.5
LAT= 42.0	U=	4.723	.3	V=	3.751	1.2	W=	.087719	7.7	T=	6.195	4.8
LAT= 48.0	U=	5.806	.4	V=	4.904	1.9	W=	.089362	8.1	T=	6.472	5.0
LAT= 54.0	U=	6.868	.5	V=	6.021	2.5	W=	.085212	8.4	T=	6.320	5.2
LAT= 60.0	U=	7.278	.5	V=	6.757	2.9	W=	.073526	8.8	T=	5.528	5.5
LAT= 66.0	U=	7.107	.5	V=	6.903	3.3	W=	.054953	8.9	T=	4.211	5.5
LAT= 72.0	U=	6.343	.8	V=	6.393	3.6	W=	.044316	9.4	T=	3.181	5.9
LAT= 78.0	U=	4.429	.6	V=	5.162	3.8	W=	.011204	9.2	T=	1.078	5.7

Z= 181.310 KM

LAT= 0.0	U=	.552	.5	V=	0.000	1.5	W=	.035556	.4	T=	1.678	8.6
LAT= 6.0	U=	.595	.4	V=	1.100	7.8	W=	.030227	.5	T=	1.426	8.6
LAT= 12.0	U=	.755	.1	V=	1.965	7.9	W=	.016405	1.3	T=	.712	8.3
LAT= 18.0	U=	1.077	11.9	V=	2.416	8.1	W=	.015698	4.5	T=	.490	4.0
LAT= 24.0	U=	1.596	11.7	V=	2.379	8.5	W=	.039543	5.7	T=	1.786	3.6
LAT= 30.0	U=	2.337	11.5	V=	1.950	9.2	W=	.064846	6.1	T=	3.164	3.7
LAT= 36.0	U=	3.302	11.4	V=	1.621	10.6	W=	.086212	6.4	T=	4.434	3.9
LAT= 42.0	U=	4.368	11.4	V=	2.218	.3	W=	.101139	6.8	T=	5.425	4.0
LAT= 48.0	U=	5.341	11.4	V=	3.505	1.2	W=	.107673	7.1	T=	5.903	4.2
LAT= 54.0	U=	6.393	11.5	V=	4.892	1.7	W=	.107199	7.4	T=	5.964	4.5
LAT= 60.0	U=	6.940	11.6	V=	5.975	2.0	W=	.095873	7.8	T=	5.366	4.7
LAT= 66.0	U=	6.923	11.5	V=	6.459	2.3	W=	.074639	7.9	T=	4.236	4.7
LAT= 72.0	U=	6.321	11.7	V=	6.207	2.6	W=	.060539	8.4	T=	3.214	5.0
LAT= 78.0	U=	4.403	11.6	V=	5.151	2.8	W=	.018403	8.5	T=	1.217	4.9

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 209.865 KM

LAT= 0.0	U=	.785	/ .1	V=	0.000	/ .3	W=	.038628	/ 11.4	T=	1.829 / 7.7
LAT= 6.0	U=	.800	/ 12.0	V=	1.020	/ 6.5	W=	.032927	/ 11.5	T=	1.615 / 7.7
LAT= 12.0	U=	.881	/ 11.7	V=	1.844	/ 6.6	W=	.017971	/ .3	T=	1.016 / 7.5
LAT= 18.0	U=	1.096	/ 11.3	V=	2.310	/ 6.8	W=	.015794	/ 3.6	T=	.467 / 5.3
LAT= 24.0	U=	1.502	/ 11.0	V=	2.320	/ 7.0	W=	.041318	/ 4.8	T=	1.373 / 3.4
LAT= 30.0	U=	2.141	/ 10.8	V=	1.855	/ 7.4	W=	.069443	/ 5.2	T=	2.641 / 3.3
LAT= 36.0	U=	3.038	/ 10.6	V=	1.048	/ 8.3	W=	.094591	/ 5.6	T=	3.894 / 3.5
LAT= 42.0	U=	4.079	/ 10.6	V=	.952	/ 11.3	W=	.113849	/ 6.0	T=	4.962 / 3.6
LAT= 48.0	U=	5.037	/ 10.6	V=	2.291	/ .6	W=	.124783	/ 6.3	T=	5.581 / 3.8
LAT= 54.0	U=	6.115	/ 10.7	V=	3.882	/ 1.1	W=	.127902	/ 6.7	T=	5.788 / 4.0
LAT= 60.0	U=	6.803	/ 10.8	V=	5.270	/ 1.4	W=	.117215	/ 7.1	T=	5.323 / 4.2
LAT= 66.0	U=	6.935	/ 10.7	V=	6.086	/ 1.6	W=	.093307	/ 7.3	T=	4.303 / 4.2
LAT= 72.0	U=	6.518	/ 11.0	V=	6.095	/ 1.9	W=	.076619	/ 7.7	T=	3.284 / 4.5
LAT= 78.0	U=	4.480	/ 10.9	V=	5.169	/ 2.0	W=	.024960	/ 8.0	T=	1.325 / 4.4

Z= 240.988 KM

LAT= 0.0	U=	.894	/ 11.8	V=	0.000	/ 11.5	W=	.039510	/ 10.8	T=	1.931 / 7.4
LAT= 6.0	U=	.890	/ 11.7	V=	1.036	/ 5.7	W=	.033537	/ 10.9	T=	1.732 / 7.4
LAT= 12.0	U=	.912	/ 11.4	V=	1.896	/ 5.8	W=	.018321	/ 11.8	T=	1.178 / 7.2
LAT= 18.0	U=	1.041	/ 11.0	V=	2.430	/ 5.9	W=	.018276	/ 3.0	T=	.570 / 5.7
LAT= 24.0	U=	1.375	/ 10.5	V=	2.540	/ 6.1	W=	.044777	/ 4.1	T=	1.208 / 3.5
LAT= 30.0	U=	1.978	/ 10.2	V=	2.178	/ 6.3	W=	.074337	/ 4.6	T=	2.423 / 3.2
LAT= 36.0	U=	2.890	/ 10.1	V=	1.358	/ 6.7	W=	.101439	/ 5.0	T=	3.683 / 3.3
LAT= 42.0	U=	3.986	/ 10.0	V=	.325	/ 9.0	W=	.122570	/ 5.4	T=	4.805 / 3.4
LAT= 48.0	U=	4.989	/ 10.1	V=	1.526	/ .3	W=	.135152	/ 5.8	T=	5.507 / 3.6
LAT= 54.0	U=	6.105	/ 10.2	V=	3.258	/ .8	W=	.139571	/ 6.2	T=	5.797 / 3.8
LAT= 60.0	U=	6.884	/ 10.3	V=	4.865	/ 1.0	W=	.128660	/ 6.6	T=	5.395 / 3.9
LAT= 66.0	U=	7.104	/ 10.3	V=	5.922	/ 1.2	W=	.102732	/ 6.8	T=	4.411 / 4.0
LAT= 72.0	U=	6.808	/ 10.5	V=	6.117	/ 1.4	W=	.085244	/ 7.4	T=	3.380 / 4.3
LAT= 78.0	U=	4.626	/ 10.5	V=	5.266	/ 1.6	W=	.028348	/ 7.7	T=	1.400 / 4.2

Z= 272.801 KM

LAT= 0.0	U=	.969	/ 11.6	V=	0.000	/ 11.1	W=	.038390	/ 10.4	T=	1.997 / 7.2
LAT= 6.0	U=	.953	/ 11.5	V=	1.081	/ 5.2	W=	.032267	/ 10.6	T=	1.804 / 7.2
LAT= 12.0	U=	.937	/ 11.2	V=	1.992	/ 5.3	W=	.017436	/ 11.6	T=	1.263 / 7.0
LAT= 18.0	U=	1.012	/ 10.8	V=	2.590	/ 5.4	W=	.021737	/ 2.6	T=	.639 / 5.8
LAT= 24.0	U=	1.308	/ 10.2	V=	2.777	/ 5.6	W=	.049381	/ 3.7	T=	1.153 / 3.5
LAT= 30.0	U=	1.914	/ 9.9	V=	2.495	/ 5.8	W=	.079686	/ 4.2	T=	2.351 / 3.2
LAT= 36.0	U=	2.871	/ 9.7	V=	1.726	/ 6.1	W=	.107377	/ 4.6	T=	3.628 / 3.2
LAT= 42.0	U=	4.037	/ 9.7	V=	.520	/ 6.6	W=	.128317	/ 5.0	T=	4.788 / 3.3
LAT= 48.0	U=	5.093	/ 9.8	V=	1.103	/ .2	W=	.140116	/ 5.5	T=	5.538 / 3.5
LAT 54.0	U=	6.244	/ 9.9	V=	2.944	/ .6	W=	.143737	/ 5.9	T=	5.870 / 3.6
LAT= 60.0	U=	7.072	/ 10.0	V=	4.702	/ .8	W=	.131681	/ 6.3	T=	5.494 / 3.8
LAT= 66.0	U=	7.329	/ 10.0	V=	5.914	/ 1.0	W=	.104350	/ 6.6	T=	4.515 / 3.9
LAT= 72.0	U=	7.090	/ 10.2	V=	6.215	/ 1.2	W=	.087344	/ 7.1	T=	3.466 / 4.2
LAT= 78.0	U=	4.783	/ 10.2	V=	5.391	/ 1.4	W=	.028906	/ 7.6	T=	1.451 / 4.1

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 304.762 KM

LAT= 0.0	U=	1.039	11.4	V=	0.000	10.9	W=	.035655	10.1	T=	2.047	7.2
LAT= 6.0	U=	1.015	11.4	V=	1.125	4.9	W=	.029515	10.3	T=	1.855	7.1
LAT= 12.0	U=	.976	11.1	V=	2.083	5.0	W=	.015833	11.7	T=	1.315	7.0
LAT= 18.0	U=	1.017	10.6	V=	2.733	5.2	W=	.025665	2.5	T=	.680	5.8
LAT= 24.0	U=	1.295	10.0	V=	2.974	5.4	W=	.054532	3.4	T=	1.142	3.5
LAT= 30.0	U=	1.917	9.7	V=	2.737	5.6	W=	.085156	3.9	T=	2.344	3.1
LAT= 36.0	U=	2.918	9.5	V=	1.992	5.8	W=	.112491	4.3	T=	3.641	3.2
LAT= 42.0	U=	4.144	9.5	V=	.768	6.1	W=	.131833	4.7	T=	4.831	3.3
LAT= 48.0	U=	5.246	9.6	V=	.880	.2	W=	.141216	5.2	T=	5.611	3.4
LAT= 54.0	U=	6.427	9.7	V=	2.806	.5	W=	.142695	5.7	T=	5.966	3.6
LAT= 60.0	U=	7.283	9.9	V=	4.672	.7	W=	.128938	6.1	T=	5.598	3.8
LAT= 66.0	U=	7.554	9.9	V=	5.984	.8	W=	.100776	6.4	T=	4.611	3.8
LAT= 72.0	U=	7.337	10.1	V=	6.342	1.0	W=	.085127	7.0	T=	3.542	4.1
LAT= 78.0	U=	4.927	10.1	V=	5.520	1.2	W=	.027508	7.6	T=	1.489	4.1

Z= 336.754 KM

LAT= 0.0	U=	1.102	11.4	V=	0.000	10.7	W=	.031494	9.9	T=	2.093	7.1
LAT= 6.0	U=	1.073	11.3	V=	1.162	4.8	W=	.025443	10.2	T=	1.899	7.1
LAT= 12.0	U=	1.018	11.1	V=	2.159	4.9	W=	.014024	12.0	T=	1.354	7.0
LAT= 18.0	U=	1.039	10.6	V=	2.849	5.0	W=	.029921	2.4	T=	.707	5.8
LAT= 24.0	U=	1.309	9.9	V=	3.127	5.2	W=	.059842	3.2	T=	1.151	3.5
LAT= 30.0	U=	1.948	9.5	V=	2.915	5.4	W=	.090379	3.6	T=	2.367	3.1
LAT= 36.0	U=	2.987	9.4	V=	2.172	5.6	W=	.116649	4.0	T=	3.688	3.1
LAT= 42.0	U=	4.260	9.4	V=	.927	5.9	W=	.133446	4.5	T=	4.906	3.3
LAT= 48.0	U=	5.399	9.5	V=	.766	.2	W=	.139299	4.9	T=	5.708	3.4
LAT= 54.0	U=	6.607	9.6	V=	2.760	.4	W=	.137717	5.4	T=	6.078	3.6
LAT= 60.0	U=	7.482	9.8	V=	4.706	.6	W=	.121901	5.9	T=	5.709	3.8
LAT= 66.0	U=	7.760	9.8	V=	6.085	.8	W=	.093410	6.3	T=	4.707	3.8
LAT= 72.0	U=	7.550	10.0	V=	6.475	1.0	W=	.079764	6.9	T=	3.617	4.1
LAT= 78.0	U=	5.057	10.0	V=	5.645	1.2	W=	.024756	7.6	T=	1.524	4.1

Z= 368.753 KM

LAT= 0.0	U=	1.153	11.3	V=	0.000	10.7	W=	.026089	9.7	T=	2.139	7.1
LAT= 6.0	U=	1.121	11.3	V=	1.192	4.7	W=	.020197	10.1	T=	1.941	7.1
LAT= 12.0	U=	1.055	11.0	V=	2.221	4.8	W=	.012820	.5	T=	1.388	6.9
LAT= 18.0	U=	1.064	10.5	V=	2.941	5.0	W=	.034421	2.4	T=	.728	5.8
LAT= 24.0	U=	1.332	9.9	V=	3.243	5.2	W=	.065112	3.0	T=	1.169	3.5
LAT= 30.0	U=	1.988	9.5	V=	3.043	5.4	W=	.095241	3.4	T=	2.406	3.1
LAT= 36.0	U=	3.058	9.3	V=	2.294	5.6	W=	.119994	3.8	T=	3.754	3.1
LAT= 42.0	U=	4.369	9.3	V=	1.024	5.8	W=	.133693	4.2	T=	4.998	3.3
LAT= 48.0	U=	5.537	9.4	V=	.714	.3	W=	.135260	4.7	T=	5.820	3.4
LAT= 54.0	U=	6.771	9.6	V=	2.764	.4	W=	.129878	5.2	T=	6.200	3.6
LAT= 60.0	U=	7.664	9.7	V=	4.772	.6	W=	.111630	5.8	T=	5.827	3.8
LAT= 66.0	U=	7.945	9.7	V=	6.197	.7	W=	.083123	6.1	T=	4.807	3.8
LAT= 72.0	U=	7.735	10.0	V=	6.607	.9	W=	.071905	6.8	T=	3.694	4.1
LAT= 78.0	U=	5.173	10.0	V=	5.765	1.1	W=	.021081	7.8	T=	1.558	4.0

Table B5. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 0 to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km at the Equinoxes (Contd)

Z= 400.753 KM

LAT= 0.0	U=	1.193 / 11.3	V=	0.000 / 10.7	W=	.019617 / 9.5	T=	2.184 / 7.1
LAT= 6.0	U=	1.158 / 11.2	V=	1.219 / 4.7	W=	.013899 / 10.0	T=	1.982 / 7.1
LAT= 12.0	U=	1.087 / 11.0	V=	2.273 / 4.8	W=	.013239 / 1.2	T=	1.418 / 6.9
LAT= 18.0	U=	1.089 / 10.5	V=	3.017 / 4.9	W=	.039029 / 2.4	T=	.746 / 5.8
LAT= 24.0	U=	1.359 / 9.9	V=	3.334 / 5.1	W=	.070171 / 2.9	T=	1.191 / 3.5
LAT= 30.0	U=	2.029 / 9.4	V=	3.138 / 5.3	W=	.099697 / 3.2	T=	2.451 / 3.1
LAT= 36.0	U=	3.125 / 9.3	V=	2.378 / 5.5	W=	.122752 / 3.8	T=	3.826 / 3.1
LAT= 42.0	U=	4.467 / 9.3	V=	1.082 / 5.7	W=	.133183 / 4.0	T=	5.097 / 3.2
LAT= 48.0	U=	5.662 / 9.4	V=	.697 / .3	W=	.130041 / 4.4	T=	5.937 / 3.4
LAT= 54.0	U=	6.920 / 9.6	V=	2.794 / .4	W=	.120237 / 4.9	T=	6.326 / 3.6
LAT= 60.0	U=	7.830 / 9.7	V=	4.852 / .5	W=	.099026 / 5.5	T=	5.947 / 3.8
LAT= 66.0	U=	8.116 / 9.7	V=	6.315 / .7	W=	.070522 / 5.9	T=	4.906 / 3.8
LAT= 72.0	U=	7.903 / 10.0	V=	6.738 / .9	W=	.061873 / 6.7	T=	3.771 / 4.1
LAT= 78.0	U=	5.282 / 10.0	V=	5.881 / 1.1	W=	.016839 / 8.0	T=	1.591 / 4.0

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice

Z= 0.000 KM														
LAT=-78.0	U=	.004	/	6.2	V=	.004	/	3.2	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT=-72.0	U=	.006	/	6.0	V=	.006	/	2.9	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT=-66.0	U=	.008	/	5.9	V=	.009	/	2.8	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT=-60.0	U=	.010	/	5.9	V=	.011	/	2.9	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT=-54.0	U=	.013	/	6.0	V=	.013	/	2.9	W=	0.000000	/	12.0	T=	.001 / .9
LAT=-48.0	U=	.015	/	6.1	V=	.016	/	3.0	W=	0.000000	/	12.0	T=	.002 / .9
LAT=-42.0	U=	.015	/	6.1	V=	.018	/	3.1	W=	0.000000	/	12.0	T=	.002 / .8
LAT=-36.0	U=	.016	/	6.1	V=	.018	/	3.0	W=	0.000000	/	12.0	T=	.003 / .8
LAT=-30.0	U=	.016	/	6.0	V=	.017	/	3.0	W=	0.000000	/	12.0	T=	.005 / .8
LAT=-24.0	U=	.015	/	5.9	V=	.014	/	2.8	W=	0.000000	/	12.0	T=	.006 / .8
LAT=-18.0	U=	.014	/	5.8	V=	.010	/	2.6	W=	0.000000	/	12.0	T=	.007 / .8
LAT=-12.0	U=	.014	/	5.8	V=	.006	/	2.3	W=	0.000000	/	12.0	T=	.007 / .8
LAT= -6.0	U=	.013	/	5.8	V=	.002	/	1.2	W=	0.000000	/	12.0	T=	.007 / .8
LAT= 0.0	U=	.013	/	5.8	V=	.003	/	9.1	W=	0.000000	/	12.0	T=	.007 / .8
LAT= 6.0	U=	.012	/	5.8	V=	.006	/	8.6	W=	0.000000	/	12.0	T=	.007 / .8
LAT= 12.0	U=	.012	/	5.8	V=	.009	/	8.5	W=	0.000000	/	12.0	T=	.006 / .8
LAT= 18.0	U=	.012	/	5.8	V=	.011	/	8.5	W=	0.000000	/	12.0	T=	.006 / .8
LAT= 24.0	U=	.012	/	5.9	V=	.012	/	8.7	W=	0.000000	/	12.0	T=	.005 / .8
LAT= 30.0	U=	.012	/	6.0	V=	.013	/	9.0	W=	0.000000	/	12.0	T=	.004 / .9
LAT= 36.0	U=	.012	/	6.2	V=	.013	/	9.1	W=	0.000000	/	12.0	T=	.002 / .9
LAT= 42.0	U=	.011	/	6.2	V=	.013	/	9.2	W=	0.000000	/	12.0	T=	.001 / .9
LAT= 48.0	U=	.010	/	6.3	V=	.011	/	9.3	W=	0.000000	/	12.0	T=	.001 / 1.0
LAT= 54.0	U=	.010	/	6.3	V=	.009	/	9.3	W=	0.000000	/	12.0	T=	.001 / 1.1
LAT= 60.0	U=	.007	/	6.4	V=	.007	/	9.3	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT= 66.0	U=	.005	/	6.4	V=	.005	/	9.3	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT= 72.0	U=	.005	/	6.4	V=	.004	/	9.4	W=	0.000000	/	12.0	T=	0.000 / 12.0
LAT= 78.0	U=	.004	/	6.5	V=	.002	/	9.8	W=	0.000000	/	12.0	T=	0.000 / 12.0
Z= 2.078 KM														
LAT=-78.0	U=	.006	/	6.4	V=	.005	/	3.2	W=	.000002	/	11.0	T=	0.000 / 12.0
LAT=-72.0	U=	.008	/	6.4	V=	.007	/	3.3	W=	.000001	/	.9	T=	0.000 / 12.0
LAT=-66.0	U=	.011	/	6.4	V=	.011	/	3.4	W=	.000001	/	3.4	T=	0.000 / .3
LAT=-60.0	U=	.014	/	6.4	V=	.014	/	3.4	W=	.000002	/	3.7	T=	.001 / .3
LAT=-54.0	U=	.016	/	6.4	V=	.017	/	3.4	W=	.000003	/	3.5	T=	.001 / .1
LAT=-48.0	U=	.018	/	6.4	V=	.020	/	3.4	W=	.000002	/	3.0	T=	.001 / .1
LAT=-42.0	U=	.019	/	6.4	V=	.021	/	3.3	W=	.000002	/	1.4	T=	.003 / .1
LAT=-36.0	U=	.019	/	6.3	V=	.021	/	3.2	W=	.000003	/	.1	T=	.004 / .1
LAT=-30.0	U=	.018	/	6.2	V=	.019	/	3.2	W=	.000005	/	11.4	T=	.005 / .1
LAT=-24.0	U=	.017	/	6.1	V=	.016	/	3.0	W=	.000006	/	10.9	T=	.007 / 12.0
LAT=-18.0	U=	.016	/	6.1	V=	.011	/	2.8	W=	.000005	/	10.6	T=	.008 / 12.0
LAT=-12.0	U=	.014	/	6.1	V=	.007	/	2.5	W=	.000003	/	10.1	T=	.008 / 12.0
LAT= -6.0	U=	.014	/	6.1	V=	.002	/	1.4	W=	.000001	/	7.4	T=	.008 / 12.0
LAT= 0.0	U=	.014	/	6.1	V=	.004	/	9.3	W=	.000003	/	4.6	T=	.008 / 12.0
LAT= 6.0	U=	.013	/	6.1	V=	.007	/	8.8	W=	.000004	/	3.8	T=	.008 / 12.0
LAT= 12.0	U=	.013	/	6.1	V=	.010	/	8.8	W=	.000005	/	3.0	T=	.007 / 12.0
LAT= 18.0	U=	.013	/	6.1	V=	.012	/	8.8	W=	.000006	/	2.2	T=	.007 / 12.0
LAT= 24.0	U=	.013	/	6.1	V=	.013	/	8.9	W=	.000007	/	1.6	T=	.006 / 12.0
LAT= 30.0	U=	.013	/	6.3	V=	.014	/	9.1	W=	.000007	/	1.3	T=	.004 / .1
LAT= 36.0	U=	.013	/	6.4	V=	.014	/	9.3	W=	.000006	/	1.2	T=	.003 / .1
LAT= 42.0	U=	.012	/	6.5	V=	.014	/	9.5	W=	.000005	/	1.5	T=	.002 / 12.0
LAT= 48.0	U=	.012	/	6.7	V=	.013	/	9.6	W=	.000003	/	2.1	T=	.002 / 12.0
LAT= 54.0	U=	.012	/	6.8	V=	.012	/	9.8	W=	.000003	/	2.8	T=	.001 / .1
LAT= 60.0	U=	.009	/	6.9	V=	.010	/	9.8	W=	.000002	/	3.3	T=	0.000 / 12.0
LAT= 66.0	U=	.007	/	6.9	V=	.008	/	9.8	W=	.000002	/	3.2	T=	0.000 / 12.0
LAT= 72.0	U=	.007	/	6.7	V=	.005	/	9.8	W=	.000001	/	11.3	T=	0.000 / 12.0
LAT= 78.0	U=	.005	/	6.7	V=	.003	/	9.8	W=	.000003	/	10.5	T=	0.000 / 12.0

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 4.161 KM														
LAT=-78.0	U=	.006	/	6.6	V=	.006	/	3.6	W=	.000002	/	11.2	T=	0.000 / 12.0
LAT=-72.0	U=	.010	/	6.5	V=	.0.0	/	3.5	W=	.000001	/	2.0	T=	0.000 / 12.0
LAT=-66.0	U=	.013	/	6.5	V=	.013	/	3.4	W=	.000002	/	3.0	T=	0.000 / .3
LAT=-60.0	U=	.015	/	6.5	V=	.016	/	3.5	W=	.000003	/	2.9	T=	.001 / .3
LAT=-54.0	U=	.017	/	6.4	V=	.018	/	3.4	W=	.000004	/	2.5	T=	.002 / .2
LAT=-48.0	U=	.019	/	6.4	V=	.020	/	3.3	W=	.000004	/	1.7	T=	.003 / .2
LAT=-42.0	U=	.020	/	6.4	V=	.022	/	3.2	W=	.000006	/	.7	T=	.003 / .1
LAT=-36.0	U=	.020	/	6.3	V=	.022	/	3.1	W=	.000008	/	11.9	T=	.004 / .1
LAT=-30.0	U=	.019	/	6.2	V=	.020	/	3.1	W=	.000010	/	11.3	T=	.006 / .1
LAT=-24.0	U=	.018	/	6.1	V=	.016	/	3.0	W=	.000011	/	10.8	T=	.007 / .1
LAT=-18.0	U=	.017	/	6.1	V=	.012	/	2.8	W=	.000009	/	10.3	T=	.008 / .1
LAT=-12.0	U=	.015	/	6.1	V=	.007	/	2.7	W=	.000006	/	9.5	T=	.008 / .1
LAT= -6.0	U=	.015	/	6.1	V=	.002	/	2.0	W=	.000004	/	7.3	T=	.009 / .1
LAT= 0.0	U=	.014	/	6.1	V=	.004	/	9.1	W=	.000006	/	5.0	T=	.009 / .1
LAT= 6.0	U=	.014	/	6.1	V=	.008	/	8.9	W=	.000009	/	4.1	T=	.008 / .1
LAT= 12.0	U=	.014	/	6.1	V=	.011	/	8.9	W=	.000012	/	3.1	T=	.007 / .1
LAT= 18.0	U=	.014	/	6.1	V=	.013	/	8.9	W=	.000014	/	2.4	T=	.007 / .1
LAT= 24.0	U=	.013	/	6.2	V=	.014	/	8.9	W=	.000015	/	1.9	T=	.006 / .1
LAT= 30.0	U=	.013	/	6.3	V=	.014	/	9.1	W=	.000016	/	1.6	T=	.005 / .1
LAT= 36.0	U=	.013	/	6.4	V=	.014	/	9.2	W=	.000015	/	1.4	T=	.003 / .1
LAT= 42.0	U=	.012	/	6.5	V=	.013	/	9.5	W=	.000012	/	1.4	T=	.002 / 12.0
LAT= 48.0	U=	.012	/	6.7	V=	.013	/	9.7	W=	.000008	/	1.5	T=	.002 / 11.9
LAT= 54.0	U=	.012	/	6.8	V=	.012	/	9.8	W=	.000005	/	1.8	T=	.001 / 12.0
LAT= 60.0	U=	.009	/	7.0	V=	.010	/	9.9	W=	.000003	/	2.4	T=	0.000 / 12.0
LAT= 66.0	U=	.008	/	7.0	V=	.008	/	10.0	W=	.000003	/	2.9	T=	0.000 / 12.0
LAT= 72.0	U=	.007	/	6.9	V=	.006	/	10.0	W=	.000001	/	11.7	T=	0.000 / 12.0
LAT= 78.0	U=	.005	/	6.9	V=	.004	/	10.0	W=	.000003	/	10.2	T=	0.000 / 12.0
Z= 9.525 KM														
LAT=-78.0	U=	.010	/	6.4	V=	.009	/	3.4	W=	.000002	/	.5	T=	0.000 / 12.0
LAT=-72.0	U=	.014	/	6.4	V=	.015	/	3.4	W=	.000002	/	12.0	T=	0.000 / 12.0
LAT=-66.0	U=	.018	/	6.4	V=	.019	/	3.3	W=	.000003	/	11.4	T=	0.000 / 11.9
LAT=-60.0	U=	.021	/	6.4	V=	.022	/	3.3	W=	.000006	/	.1	T=	.001 / 11.9
LAT=-54.0	U=	.023	/	6.3	V=	.025	/	3.3	W=	.000010	/	11.9	T=	.002 / 11.8
LAT=-48.0	U=	.023	/	6.2	V=	.026	/	3.2	W=	.000015	/	11.8	T=	.002 / 11.8
LAT=-42.0	U=	.023	/	6.2	V=	.026	/	3.1	W=	.000020	/	11.7	T=	.004 / 11.9
LAT=-36.0	U=	.023	/	6.2	V=	.023	/	3.1	W=	.000024	/	11.5	T=	.005 / 11.9
LAT=-30.0	U=	.021	/	6.1	V=	.021	/	3.1	W=	.000025	/	11.4	T=	.006 / 11.9
LAT=-24.0	U=	.019	/	6.1	V=	.017	/	3.0	W=	.000022	/	11.0	T=	.008 / 11.9
LAT=-18.0	U=	.018	/	6.1	V=	.012	/	3.0	W=	.000016	/	10.4	T=	.009 / 12.0
LAT=-12.0	U=	.016	/	6.1	V=	.008	/	3.0	W=	.000008	/	9.2	T=	.009 / .1
LAT= -6.0	U=	.016	/	6.1	V=	.003	/	3.0	W=	.000008	/	6.0	T=	.009 / .1
LAT= 0.0	U=	.015	/	6.1	V=	.002	/	8.9	W=	.000019	/	4.5	T=	.010 / .2
LAT= 6.0	U=	.015	/	6.1	V=	.007	/	9.0	W=	.000031	/	3.8	T=	.009 / .2
LAT= 12.0	U=	.015	/	6.1	V=	.011	/	9.0	W=	.000040	/	3.2	T=	.009 / .1
LAT= 18.0	U=	.015	/	6.1	V=	.014	/	9.0	W=	.000047	/	2.7	T=	.009 / 12.0
LAT= 24.0	U=	.016	/	6.2	V=	.015	/	9.1	W=	.000053	/	2.3	T=	.008 / 11.9
LAT= 30.0	U=	.016	/	6.2	V=	.017	/	9.1	W=	.000052	/	2.0	T=	.007 / 11.9
LAT= 36.0	U=	.016	/	6.3	V=	.017	/	9.2	W=	.000046	/	1.7	T=	.005 / 11.8
LAT= 42.0	U=	.015	/	6.3	V=	.016	/	9.2	W=	.000037	/	1.5	T=	.004 / 11.6
LAT= 48.0	U=	.015	/	6.3	V=	.016	/	9.3	W=	.000027	/	1.3	T=	.002 / 11.5
LAT= 54.0	U=	.015	/	6.4	V=	.015	/	9.4	W=	.000018	/	1.1	T=	.002 / 11.5
LAT= 60.0	U=	.012	/	6.5	V=	.013	/	9.5	W=	.000010	/	.9	T=	.001 / 11.1
LAT= 66.0	U=	.010	/	6.5	V=	.012	/	9.5	W=	.000008	/	2.0	T=	0.000 / 11.1
LAT= 72.0	U=	.009	/	6.5	V=	.009	/	9.5	W=	.000003	/	11.0	T=	0.000 / 12.0
LAT= 78.0	U=	.006	/	6.5	V=	.005	/	9.5	W=	.000005	/	9.7	T=	0.000 / 12.0

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 14.879 KM												
LAT=-78.0	U=	.010	6.0	V=	.010	3.0	W=	.000003	.3	T=	0.000	12.0
LAT=-72.0	U=	.016	6.0	V=	.016	2.9	W=	.000005	11.1	T=	0.000	12.0
LAT=-66.0	U=	.021	6.0	V=	.021	3.0	W=	.000010	10.5	T=	0.000	10.6
LAT=-60.0	U=	.025	6.0	V=	.026	3.0	W=	.000016	11.0	T=	.001	10.6
LAT=-54.0	U=	.028	6.0	V=	.030	3.0	W=	.000026	11.0	T=	.002	10.7
LAT=-48.0	U=	.030	6.0	V=	.033	3.0	W=	.000038	11.0	T=	.002	10.8
LAT=-42.0	U=	.030	6.0	V=	.033	3.0	W=	.000047	11.1	T=	.004	11.0
LAT=-36.0	U=	.029	6.0	V=	.030	3.0	W=	.000053	11.1	T=	.005	11.2
LAT=-30.0	U=	.026	6.0	V=	.026	3.1	W=	.000052	11.1	T=	.007	11.4
LAT=-24.0	U=	.024	6.1	V=	.020	3.0	W=	.000040	11.1	T=	.008	11.6
LAT=-18.0	U=	.022	6.1	V=	.014	3.2	W=	.000020	11.1	T=	.009	11.9
LAT=-12.0	U=	.020	6.1	V=	.008	3.4	W=	.000006	3.3	T=	.011	.1
LAT= -6.0	U=	.020	6.2	V=	.004	3.7	W=	.000034	4.1	T=	.012	.2
LAT= 0.0	U=	.019	6.2	V=	.001	7.4	W=	.000061	3.9	T=	.013	.3
LAT= 6.0	U=	.019	6.2	V=	.005	9.1	W=	.000083	3.4	T=	.015	.2
LAT= 12.0	U=	.019	6.2	V=	.009	9.3	W=	.000102	3.1	T=	.015	.1
LAT= 18.0	U=	.021	6.2	V=	.015	9.3	W=	.000113	2.8	T=	.015	12.0
LAT= 24.0	U=	.022	6.1	V=	.020	9.3	W=	.000117	2.4	T=	.014	11.8
LAT= 30.0	U=	.024	6.1	V=	.025	9.2	W=	.000112	2.2	T=	.012	11.7
LAT= 36.0	U=	.025	6.0	V=	.028	9.1	W=	.000097	1.9	T=	.010	11.5
LAT= 42.0	U=	.025	6.0	V=	.028	9.0	W=	.000076	1.7	T=	.007	11.3
LAT= 48.0	U=	.024	5.9	V=	.026	8.9	W=	.000055	1.5	T=	.005	11.2
LAT= 54.0	U=	.022	5.8	V=	.023	8.9	W=	.000034	1.3	T=	.004	11.1
LAT= 60.0	U=	.018	5.7	V=	.020	8.8	W=	.000018	1.0	T=	.002	10.8
LAT= 66.0	U=	.016	5.8	V=	.016	8.8	W=	.000016	2.0	T=	.001	11.2
LAT= 72.0	U=	.012	5.7	V=	.011	8.7	W=	.000006	11.0	T=	0.000	11.4
LAT= 78.0	U=	.008	5.6	V=	.007	8.6	W=	.000009	9.6	T=	0.000	5.4
Z= 20.239 KM												
LAT=-78.0	U=	.015	5.2	V=	.013	2.3	W=	.000005	11.6	T=	.001	9.4
LAT=-72.0	U=	.021	5.2	V=	.021	2.3	W=	.000010	10.8	T=	.001	9.0
LAT=-66.0	U=	.027	5.2	V=	.029	2.3	W=	.000019	10.3	T=	.001	8.2
LAT=-60.0	U=	.033	5.2	V=	.035	2.3	W=	.000030	10.5	T=	.002	8.7
LAT=-54.0	U=	.037	5.3	V=	.040	2.3	W=	.000050	10.4	T=	.004	8.8
LAT=-48.0	U=	.039	5.4	V=	.043	2.4	W=	.000070	10.4	T=	.005	8.8
LAT=-42.0	U=	.039	5.5	V=	.043	2.5	W=	.000086	10.5	T=	.006	9.0
LAT=-36.0	U=	.038	5.6	V=	.041	2.7	W=	.000095	10.5	T=	.007	9.4
LAT=-30.0	U=	.035	5.8	V=	.037	3.1	W=	.000088	10.5	T=	.007	10.1
LAT=-24.0	U=	.033	6.0	V=	.032	3.4	W=	.000062	10.7	T=	.009	11.0
LAT=-18.0	U=	.033	6.2	V=	.028	3.7	W=	.000024	12.0	T=	.013	11.7
LAT=-12.0	U=	.033	6.2	V=	.023	3.8	W=	.000050	2.9	T=	.019	12.0
LAT= -6.0	U=	.033	6.2	V=	.016	3.8	W=	.000108	3.3	T=	.024	.2
LAT= 0.0	U=	.034	6.2	V=	.007	3.3	W=	.000160	3.3	T=	.030	.3
LAT= 6.0	U=	.035	6.2	V=	.006	11.6	W=	.000198	3.2	T=	.033	.2
LAT= 12.0	U=	.036	6.2	V=	.016	10.4	W=	.000217	3.0	T=	.035	12.0
LAT= 18.0	U=	.038	6.2	V=	.026	9.8	W=	.000221	2.7	T=	.034	11.9
LAT= 24.0	U=	.042	6.1	V=	.036	9.4	W=	.000212	2.5	T=	.031	11.7
LAT= 30.0	U=	.046	5.9	V=	.046	9.1	W=	.000190	2.3	T=	.027	11.6
LAT= 36.0	U=	.050	5.8	V=	.054	8.8	W=	.000159	2.1	T=	.022	11.4
LAT= 42.0	U=	.053	5.6	V=	.057	8.6	W=	.000124	2.0	T=	.017	11.2
LAT= 48.0	U=	.053	5.5	V=	.058	8.5	W=	.000089	1.9	T=	.011	11.1
LAT= 54.0	U=	.051	5.4	V=	.054	8.5	W=	.000056	1.7	T=	.007	11.1
LAT= 60.0	U=	.043	5.3	V=	.047	8.4	W=	.000029	1.6	T=	.004	10.9
LAT= 66.0	U=	.038	5.4	V=	.038	8.4	W=	.000031	2.4	T=	.003	11.4
LAT= 72.0	U=	.028	5.3	V=	.029	8.3	W=	.000006	11.5	T=	.001	9.7
LAT= 78.0	U=	.018	5.2	V=	.019	8.3	W=	.000016	9.5	T=	.001	6.8

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 25.607 KM												
LAT=-78.0	U=	.020	3.9	V=	.018	.8	W=	.000004	9.4	T=	.001	7.8
LAT=-72.0	U=	.029	3.9	V=	.028	.9	W=	.000014	9.4	T=	.001	7.3
LAT=-66.0	U=	.036	3.9	V=	.036	1.0	W=	.000028	9.3	T=	.002	6.9
LAT=-60.0	U=	.041	4.0	V=	.043	1.1	W=	.000040	9.3	T=	.003	7.1
LAT=-54.0	U=	.045	4.2	V=	.047	1.3	W=	.000068	9.3	T=	.005	7.1
LAT=-48.0	U=	.045	4.5	V=	.049	1.6	W=	.000092	9.3	T=	.007	7.1
LAT=-42.0	U=	.046	4.9	V=	.051	2.0	W=	.000109	9.3	T=	.007	7.3
LAT=-36.0	U=	.048	5.3	V=	.055	2.6	W=	.000115	9.3	T=	.006	7.9
LAT=-30.0	U=	.052	5.7	V=	.061	3.1	W=	.000096	9.5	T=	.005	9.8
LAT=-24.0	U=	.056	6.0	V=	.067	3.4	W=	.000051	10.0	T=	.011	11.2
LAT=-18.0	U=	.060	6.2	V=	.068	3.6	W=	.000045	1.6	T=	.022	11.7
LAT=-12.0	U=	.062	6.2	V=	.062	3.7	W=	.000129	2.5	T=	.034	11.8
LAT= -6.0	U=	.062	6.2	V=	.047	3.5	W=	.000225	2.7	T=	.047	11.9
LAT= 0.0	U=	.064	6.2	V=	.026	3.0	W=	.000308	2.8	T=	.057	12.0
LAT= 6.0	U=	.066	6.1	V=	.013	.4	W=	.000362	2.8	T=	.064	12.0
LAT= 12.0	U=	.070	6.1	V=	.030	10.4	W=	.000381	2.8	T=	.065	11.9
LAT= 18.0	U=	.076	6.1	V=	.051	9.8	W=	.000369	2.8	T=	.062	11.9
LAT= 24.0	U=	.082	6.1	V=	.071	9.4	W=	.000330	2.8	T=	.055	11.9
LAT= 30.0	U=	.089	5.8	V=	.088	9.1	W=	.000274	2.8	T=	.045	11.8
LAT= 36.0	U=	.096	5.7	V=	.102	8.8	W=	.000213	2.7	T=	.035	11.7
LAT= 42.0	U=	.100	5.5	V=	.109	8.6	W=	.000154	2.7	T=	.024	11.6
LAT= 48.0	U=	.102	5.4	V=	.111	8.4	W=	.000104	2.6	T=	.016	11.5
LAT= 54.0	U=	.099	5.3	V=	.106	8.4	W=	.000063	2.5	T=	.010	11.4
LAT= 60.0	U=	.088	5.2	V=	.095	8.3	W=	.000029	2.4	T=	.004	11.3
LAT= 66.0	U=	.080	5.3	V=	.078	8.3	W=	.000040	2.7	T=	.004	11.6
LAT= 72.0	U=	.058	5.2	V=	.059	8.3	W=	.000005	11.1	T=	.001	10.4
LAT= 78.0	U=	.037	5.1	V=	.041	8.3	W=	.000022	9.3	T=	.002	6.4
Z= 30.985 KM												
LAT=-78.0	U=	.018	2.7	V=	.017	11.6	W=	.000014	6.8	T=	.001	3.8
LAT=-72.0	U=	.025	2.6	V=	.025	11.7	W=	.000025	6.9	T=	.003	4.1
LAT=-66.0	U=	.030	2.6	V=	.030	11.8	W=	.000037	7.0	T=	.003	4.3
LAT=-60.0	U=	.032	3.0	V=	.034	.1	W=	.000058	6.8	T=	.005	3.9
LAT=-54.0	U=	.034	3.5	V=	.036	.5	W=	.000090	7.0	T=	.007	4.0
LAT=-48.0	U=	.035	4.3	V=	.041	1.3	W=	.000119	7.0	T=	.009	3.8
LAT=-42.0	U=	.045	5.0	V=	.053	2.0	W=	.000134	7.0	T=	.009	3.4
LAT=-36.0	U=	.061	5.4	V=	.074	2.6	W=	.000131	6.8	T=	.009	2.6
LAT=-30.0	U=	.078	5.7	V=	.099	3.0	W=	.000097	6.6	T=	.011	1.1
LAT=-24.0	U=	.093	5.9	V=	.120	3.1	W=	.000048	4.8	T=	.021	.1
LAT=-18.0	U=	.103	6.0	V=	.131	3.2	W=	.000119	2.5	T=	.038	11.7
LAT=-12.0	U=	.108	6.0	V=	.125	3.2	W=	.000239	2.2	T=	.056	11.6
LAT= -6.0	U=	.111	6.0	V=	.101	3.1	W=	.000367	2.2	T=	.075	11.6
LAT= 0.0	U=	.112	6.0	V=	.061	3.1	W=	.000470	2.3	T=	.092	11.6
LAT= 6.0	U=	.110	6.0	V=	.014	1.9	W=	.000531	2.4	T=	.101	11.6
LAT= 12.0	U=	.103	6.0	V=	.043	9.7	W=	.000545	2.6	T=	.103	11.7
LAT= 18.0	U=	.132	6.0	V=	.090	9.3	W=	.000520	2.8	T=	.097	11.8
LAT= 24.0	U=	.143	5.9	V=	.130	9.1	W=	.000463	3.0	T=	.085	11.9
LAT= 30.0	U=	.153	5.8	V=	.158	9.0	W=	.000387	3.4	T=	.068	.1
LAT= 36.0	U=	.160	5.8	V=	.174	8.9	W=	.000302	3.5	T=	.051	.1
LAT= 42.0	U=	.162	5.7	V=	.179	8.7	W=	.000218	3.7	T=	.034	.2
LAT= 48.0	U=	.159	5.6	V=	.175	8.6	W=	.000146	4.0	T=	.021	.3
LAT= 54.0	U=	.152	5.5	V=	.162	8.6	W=	.000084	4.1	T=	.012	.3
LAT= 60.0	U=	.132	5.4	V=	.143	8.5	W=	.000037	4.3	T=	.004	.5
LAT= 66.0	U=	.121	5.5	V=	.118	8.4	W=	.000042	3.5	T=	.005	.2
LAT= 72.0	U=	.085	5.3	V=	.089	8.4	W=	.000006	6.9	T=	0.000	4.7
LAT= 78.0	U=	.053	5.2	V=	.061	8.4	W=	.000021	8.7	T=	.003	6.0

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 36.378 KM														
LAT=-78.0	U=	.015	/ 8.7	V=	.013	/ 5.7	W=	.000026	/ 6.3	T=	.003	/ 3.2		
LAT=-72.0	U=	.021	/ 8.8	V=	.019	/ 5.6	W=	.000045	/ 5.8	T=	.005	/ 2.9		
LAT=-66.0	U=	.024	/ 8.8	V=	.024	/ 5.5	W=	.000066	/ 5.3	T=	.006	/ 2.3		
LAT=-60.0	U=	.029	/ 8.2	V=	.029	/ 5.0	W=	.000108	/ 5.1	T=	.011	/ 2.1		
LAT=-54.0	U=	.034	/ 7.5	V=	.035	/ 4.3	W=	.000155	/ 5.2	T=	.016	/ 2.1		
LAT=-48.0	U=	.046	/ 6.7	V=	.050	/ 3.6	W=	.000211	/ 5.1	T=	.022	/ 1.9		
LAT=-42.0	U=	.066	/ 6.3	V=	.075	/ 3.1	W=	.000253	/ 4.9	T=	.028	/ 1.6		
LAT=-36.0	U=	.094	/ 6.0	V=	.110	/ 2.8	W=	.000280	/ 4.7	T=	.033	/ 1.2		
LAT=-30.0	U=	.123	/ 5.8	V=	.149	/ 2.7	W=	.000282	/ 4.3	T=	.041	/ .8		
LAT=-24.0	U=	.148	/ 5.8	V=	.184	/ 2.7	W=	.000274	/ 3.7	T=	.052	/ .3		
LAT=-18.0	U=	.165	/ 5.7	V=	.204	/ 2.6	W=	.000298	/ 2.8	T=	.068	/ 11.8		
LAT=-12.0	U=	.175	/ 5.7	V=	.200	/ 2.7	W=	.000375	/ 2.2	T=	.087	/ 11.5		
LAT= -6.0	U=	.177	/ 5.8	V=	.171	/ 2.8	W=	.000474	/ 1.9	T=	.108	/ 11.3		
LAT= 0.0	U=	.177	/ 5.8	V=	.114	/ 3.1	W=	.000555	/ 1.9	T=	.124	/ 11.4		
LAT= 6.0	U=	.180	/ 5.8	V=	.038	/ 3.8	W=	.000595	/ 1.9	T=	.134	/ 11.4		
LAT= 12.0	U=	.190	/ 5.8	V=	.058	/ 8.3	W=	.000595	/ 2.2	T=	.135	/ 11.6		
LAT= 18.0	U=	.204	/ 5.8	V=	.138	/ 8.7	W=	.000580	/ 2.7	T=	.129	/ 11.7		
LAT= 24.0	U=	.221	/ 5.8	V=	.208	/ 8.8	W=	.000562	/ 3.2	T=	.115	/ 11.9		
LAT= 30.0	U=	.236	/ 5.8	V=	.254	/ 8.9	W=	.000537	/ 3.6	T=	.097	/ .2		
LAT= 36.0	U=	.245	/ 5.8	V=	.274	/ 9.0	W=	.000489	/ 4.0	T=	.076	/ .4		
LAT= 42.0	U=	.240	/ 5.8	V=	.272	/ 9.0	W=	.000415	/ 4.2	T=	.055	/ .6		
LAT= 48.0	U=	.227	/ 5.8	V=	.253	/ 8.9	W=	.000321	/ 4.3	T=	.037	/ .8		
LAT= 54.0	U=	.205	/ 5.8	V=	.221	/ 8.9	W=	.000216	/ 4.6	T=	.023	/ 1.0		
LAT= 60.0	U=	.170	/ 5.7	V=	.186	/ 8.9	W=	.000125	/ 4.7	T=	.010	/ 1.5		
LAT= 66.0	U=	.151	/ 5.7	V=	.147	/ 8.8	W=	.000080	/ 4.5	T=	.008	/ 1.0		
LAT= 72.0	U=	.101	/ 5.7	V=	.108	/ 8.7	W=	.000040	/ 5.0	T=	.002	/ 2.3		
LAT= 78.0	U=	.062	/ 5.6	V=	.074	/ 8.7	W=	.000018	/ 5.9	T=	.002	/ 5.0		
Z= 41.789 KM														
LAT=-78.0	U=	.056	/ 8.0	V=	.052	/ 4.7	W=	.000009	/ 6.9	T=	.002	/ 3.8		
LAT=-72.0	U=	.082	/ 7.9	V=	.079	/ 4.8	W=	.000025	/ 4.1	T=	.003	/ 1.8		
LAT=-66.0	U=	.102	/ 7.8	V=	.103	/ 4.7	W=	.000079	/ 3.4	T=	.007	/ .5		
LAT=-60.0	U=	.122	/ 7.6	V=	.124	/ 4.5	W=	.000134	/ 3.5	T=	.013	/ .5		
LAT=-54.0	U=	.135	/ 7.4	V=	.141	/ 4.3	W=	.000200	/ 3.5	T=	.020	/ .5		
LAT=-48.0	U=	.148	/ 7.0	V=	.158	/ 4.0	W=	.000301	/ 3.4	T=	.033	/ .4		
LAT=-42.0	U=	.164	/ 6.6	V=	.176	/ 3.5	W=	.000407	/ 3.3	T=	.048	/ .3		
LAT=-36.0	U=	.184	/ 6.2	V=	.201	/ 3.1	W=	.000507	/ 3.3	T=	.065	/ .2		
LAT=-30.0	U=	.208	/ 5.8	V=	.233	/ 2.8	W=	.000584	/ 3.3	T=	.082	/ .2		
LAT=-24.0	U=	.231	/ 5.7	V=	.263	/ 2.5	W=	.000614	/ 3.1	T=	.098	/ 12.0		
LAT=-18.0	U=	.247	/ 5.6	V=	.278	/ 2.4	W=	.000594	/ 2.9	T=	.113	/ 11.8		
LAT=-12.0	U=	.255	/ 5.6	V=	.266	/ 2.4	W=	.000543	/ 2.6	T=	.126	/ 11.7		
LAT= -6.0	U=	.256	/ 5.6	V=	.223	/ 2.5	W=	.000484	/ 2.2	T=	.136	/ 11.5		
LAT= 0.0	U=	.254	/ 5.6	V=	.150	/ 2.8	W=	.000449	/ 1.8	T=	.145	/ 11.4		
LAT= 6.0	U=	.255	/ 5.7	V=	.063	/ 3.8	W=	.000438	/ 1.6	T=	.149	/ 11.3		
LAT= 12.0	U=	.263	/ 5.7	V=	.083	/ 7.4	W=	.000432	/ 1.7	T=	.149	/ 11.5		
LAT= 18.0	U=	.279	/ 5.7	V=	.182	/ 8.1	W=	.000444	/ 2.2	T=	.145	/ 11.6		
LAT= 24.0	U=	.300	/ 5.8	V=	.273	/ 8.4	W=	.000514	/ 2.9	T=	.136	/ 11.8		
LAT= 30.0	U=	.322	/ 5.8	V=	.341	/ 8.7	W=	.000619	/ 3.4	T=	.124	/ .1		
LAT= 36.0	U=	.337	/ 6.0	V=	.378	/ 8.9	W=	.000690	/ 3.7	T=	.108	/ .3		
LAT= 42.0	U=	.339	/ 6.1	V=	.386	/ 9.1	W=	.000684	/ 3.9	T=	.086	/ .5		
LAT= 48.0	U=	.330	/ 6.2	V=	.372	/ 9.2	W=	.000604	/ 4.0	T=	.064	/ .8		
LAT= 54.0	U=	.306	/ 6.3	V=	.335	/ 9.3	W=	.000462	/ 4.2	T=	.043	/ .9		
LAT= 60.0	U=	.262	/ 6.4	V=	.287	/ 9.4	W=	.000311	/ 4.3	T=	.024	/ 1.2		
LAT= 66.0	U=	.235	/ 6.4	V=	.230	/ 9.5	W=	.000185	/ 4.3	T=	.016	/ 1.1		
LAT= 72.0	U=	.164	/ 6.5	V=	.171	/ 9.5	W=	.000126	/ 4.2	T=	.008	/ 1.4		
LAT= 78.0	U=	.104	/ 6.6	V=	.117	/ 9.5	W=	.000060	/ 4.0	T=	.002	/ 2.3		

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 47.224 KM														
LAT=-78.0	U=	.074	/	6.9	V=	.076	/	3.6	W=	.000034	/	.3	T=	.002 / 8.4
LAT=-72.0	U=	.115	/	6.8	V=	.117	/	3.7	W=	.000075	/	1.3	T=	.004 / 9.9
LAT=-66.0	U=	.159	/	6.7	V=	.160	/	3.6	W=	.000153	/	2.0	T=	.011 / 10.8
LAT=-60.0	U=	.206	/	6.6	V=	.207	/	3.6	W=	.000245	/	2.1	T=	.020 / 11.0
LAT=-54.0	U=	.245	/	6.5	V=	.253	/	3.5	W=	.000361	/	2.0	T=	.030 / 11.1
LAT=-48.0	U=	.280	/	6.3	V=	.296	/	3.3	W=	.000522	/	2.1	T=	.048 / 11.3
LAT=-42.0	U=	.309	/	6.2	V=	.330	/	3.2	W=	.000680	/	2.2	T=	.069 / 11.4
LAT=-36.0	U=	.330	/	6.1	V=	.354	/	3.0	W=	.000826	/	2.4	T=	.092 / 11.5
LAT=-30.0	U=	.342	/	5.9	V=	.364	/	2.9	W=	.000919	/	2.5	T=	.116 / 11.7
LAT=-24.0	U=	.346	/	5.8	V=	.359	/	2.6	W=	.000930	/	2.5	T=	.137 / 11.7
LAT=-18.0	U=	.344	/	5.7	V=	.338	/	2.4	W=	.000837	/	2.7	T=	.151 / 11.8
LAT=-12.0	U=	.339	/	5.6	V=	.297	/	2.3	W=	.000664	/	2.8	T=	.157 / 11.7
LAT= -6.0	U=	.332	/	5.5	V=	.234	/	2.1	W=	.000424	/	3.0	T=	.158 / 11.7
LAT= 0.0	U=	.326	/	5.6	V=	.146	/	2.3	W=	.000179	/	3.0	T=	.154 / 11.7
LAT= 6.0	U=	.324	/	5.6	V=	.044	/	3.1	W=	.000041	/	.5	T=	.150 / 11.6
LAT= 12.0	U=	.330	/	5.6	V=	.086	/	7.4	W=	.000096	/	11.7	T=	.148 / 11.5
LAT= 18.0	U=	.342	/	5.6	V=	.195	/	7.9	W=	.000163	/	1.2	T=	.148 / 11.6
LAT= 24.0	U=	.361	/	5.7	V=	.296	/	8.1	W=	.000355	/	2.2	T=	.147 / 11.8
LAT= 30.0	U=	.387	/	5.7	V=	.379	/	8.4	W=	.000600	/	2.8	T=	.143 / 11.9
LAT= 36.0	U=	.416	/	5.9	V=	.444	/	8.7	W=	.000787	/	3.0	T=	.132 / 12.0
LAT= 42.0	U=	.444	/	6.1	V=	.492	/	9.0	W=	.000852	/	3.2	T=	.111 / .2
LAT= 48.0	U=	.465	/	6.3	V=	.522	/	9.3	W=	.000797	/	3.3	T=	.086 / .3
LAT= 54.0	U=	.479	/	6.5	V=	.525	/	9.4	W=	.000635	/	3.4	T=	.060 / .4
LAT= 60.0	U=	456	/	6.6	V=	.499	/	9.6	W=	.000452	/	3.6	T=	.034 / .6
LAT= 66.0	U=	.432	/	6.7	V=	.436	/	9.7	W=	.000232	/	3.7	T=	.020 / .6
LAT= 72.0	U=	.341	/	6.8	V=	.346	/	9.7	W=	.000187	/	3.6	T=	.012 / .7
LAT= 78.0	U=	.234	/	6.9	V=	.245	/	9.8	W=	.000103	/	3.3	T=	.004 / .6
Z= 52.691 KM														
LAT=-78.0	U=	.115	/	5.6	V=	.121	/	2.6	W=	.000069	/	.8	T=	.003 / 8.6
LAT=-72.0	U=	.179	/	5.7	V=	.184	/	2.7	W=	.000133	/	1.4	T=	.005 / 9.7
LAT=-66.0	U=	.253	/	5.8	V=	.252	/	2.8	W=	.000227	/	1.9	T=	.010 / 10.6
LAT=-60.0	U=	.324	/	5.7	V=	.325	/	2.8	W=	.000355	/	1.8	T=	.018 / 10.7
LAT=-54.0	U=	.382	/	5.8	V=	.395	/	2.8	W=	.000516	/	1.8	T=	.030 / 10.7
LAT=-48.0	U=	.432	/	5.8	V=	.455	/	2.9	W=	.000718	/	1.8	T=	.048 / 10.9
LAT=-42.0	U=	.466	/	5.8	V=	.496	/	2.9	W=	.000908	/	1.8	T=	.071 / 11.0
LAT=-36.0	U=	.482	/	5.8	V=	.513	/	2.9	W=	.001065	/	1.8	T=	.096 / 11.2
LAT=-30.0	U=	.478	/	5.8	V=	.499	/	2.9	W=	.001142	/	1.9	T=	.123 / 11.3
LAT=-24.0	U=	.458	/	5.8	V=	.452	/	2.8	W=	.001093	/	1.9	T=	.145 / 11.4
LAT=-18.0	U=	.433	/	5.8	V=	.381	/	2.7	W=	000895	/	2.1	T=	.161 / 11.5
LAT=-12.0	U=	.410	/	5.7	V=	.297	/	2.6	W=	.000598	/	2.5	T=	.168 / 11.6
LAT= -6.0	U=	.391	/	5.6	V=	.208	/	2.3	W=	.000287	/	3.7	T=	.168 / 11.8
LAT= 0.0	U=	.380	/	5.6	V=	.118	/	2.0	W=	.000331	/	6.3	T=	.162 / 11.9
LAT= 6.0	U=	.375	/	5.6	V=	.026	/	1.2	W=	.000500	/	7.1	T=	.157 / 11.9
LAT= 12.0	U=	.377	/	5.6	V=	.076	/	8.1	W=	.000465	/	7.4	T=	.155 / 11.9
LAT= 18.0	U=	.387	/	5.6	V=	.171	/	8.0	W=	.000228	/	7.6	T=	.156 / 11.8
LAT= 24.0	U=	405	/	5.7	V=	.279	/	8.0	W=	.000185	/	1.5	T=	.158 / 11.7
LAT= 30.0	U=	.436	/	5.7	V=	.378	/	8.3	W=	.000626	/	1.7	T=	.157 / 11.7
LAT= 36.0	U=	.485	/	5.8	V=	.480	/	8.6	W=	.000934	/	1.7	T=	.145 / 11.7
LAT= 42.0	U=	.546	/	6.0	V=	.582	/	8.9	W=	.001031	/	1.8	T=	.124 / 11.7
LAT= 48.0	U=	.608	/	6.2	V=	.668	/	9.2	W=	.000948	/	1.8	T=	.097 / 11.7
LAT= 54.0	U=	.662	/	6.3	V=	.722	/	9.3	W=	.000718	/	1.8	T=	.068 / 11.7
LAT= 60.0	U=	.696	/	6.5	V=	.723	/	9.5	W=	.000485	/	1.9	T=	.039 / 11.7
LAT= 66.0	U=	.646	/	6.5	V=	.659	/	9.5	W=	.000192	/	1.1	T=	.019 / 11.6
LAT= 72.0	U=	.535	/	6.6	V=	.538	/	9.5	W=	.000174	/	1.8	T=	.013 / 11.6
LAT= 78.0	U=	.375	/	6.6	V=	.385	/	9.6	W=	.000119	/	2.5	T=	.006 / 11.8

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 58.200 KM												
LAT=-78.0	U=	.156	5.2	V=	.161	2.4	W=	.000092	1.5	T=	.003	8.4
LAT=-72.0	U=	.239	5.3	V=	.244	2.4	W=	.000171	1.9	T=	.003	9.4
LAT=-66.0	U=	.331	5.4	V=	.331	2.4	W=	.000266	2.1	T=	.005	10.8
LAT=-60.0	U=	.417	5.4	V=	.420	2.5	W=	.000406	1.9	T=	.012	10.7
LAT=-54.0	U=	.487	5.5	V=	.505	2.5	W=	.000578	1.7	T=	.022	10.6
LAT=-48.0	U=	.545	5.6	V=	.576	2.6	W=	.000787	1.6	T=	.041	10.7
LAT=-42.0	U=	.583	5.7	V=	.620	2.7	W=	.000979	1.5	T=	.064	10.8
LAT=-36.0	U=	.598	5.7	V=	.633	2.7	W=	.001141	1.3	T=	.092	10.9
LAT=-30.0	U=	.584	5.7	V=	.605	2.8	W=	.001223	1.2	T=	.121	11.1
LAT=-24.0	U=	.550	5.7	V=	.533	2.8	W=	.001158	1.1	T=	.146	11.1
LAT=-18.0	U=	.506	5.8	V=	.426	2.9	W=	.000892	1.0	T=	.162	11.4
LAT=-12.0	U=	.465	5.7	V=	.306	2.8	W=	.000452	1.0	T=	.172	11.6
LAT= -6.0	U=	.432	5.6	V=	.180	2.7	W=	.000134	6.5	T=	.173	11.7
LAT= 0.0	U=	.415	5.6	V=	.072	2.5	W=	.000710	6.8	T=	.174	12.0
LAT= 6.0	U=	.409	5.6	V=	.012	9.3	W=	.001073	6.7	T=	.174	.1
LAT= 12.0	U=	.409	5.7	V=	.078	8.4	W=	.001042	6.7	T=	.175	.1
LAT= 18.0	U=	.419	5.8	V=	.152	8.4	W=	.000640	6.7	T=	.177	12.0
LAT= 24.0	U=	.440	5.7	V=	.240	8.4	W=	.000086	1.0	T=	.178	11.8
LAT= 30.0	U=	.482	5.7	V=	.359	8.6	W=	.000882	.6	T=	.175	11.6
LAT= 36.0	U=	.557	5.8	V=	.513	8.7	W=	.001465	.5	T=	.165	11.2
LAT= 42.0	U=	.657	5.9	V=	.681	8.8	W=	.001677	.4	T=	.143	11.0
LAT= 48.0	U=	.758	6.0	V=	.820	8.9	W=	.001577	.3	T=	.115	10.9
LAT= 54.0	U=	.844	6.0	V=	.914	9.0	W=	.001228	12.0	T=	.082	10.7
LAT= 60.0	U=	.863	6.0	V=	.930	9.0	W=	.000803	12.0	T=	.051	10.7
LAT= 66.0	U=	.831	6.0	V=	.854	9.0	W=	.000574	10.9	T=	.024	10.3
LAT= 72.0	U=	.699	6.0	V=	.700	9.0	W=	.000291	11.5	T=	.017	10.6
LAT= 78.0	U=	.495	5.9	V=	.498	9.0	W=	.000106	1.6	T=	.010	11.4
Z= 63.765 KM												
LAT=-78.0	U=	.187	5.1	V=	.193	2.3	W=	.000127	2.2	T=	.001	8.9
LAT=-72.0	U=	.283	5.2	V=	.288	2.3	W=	.000222	2.4	T=	.001	11.5
LAT=-66.0	U=	.382	5.3	V=	.387	2.3	W=	.000316	2.5	T=	.004	.2
LAT=-60.0	U=	.477	5.3	V=	.486	2.4	W=	.000464	2.2	T=	.010	11.1
LAT=-54.0	U=	.556	5.3	V=	.580	2.3	W=	.000638	1.8	T=	.021	10.7
LAT=-48.0	U=	.622	5.4	V=	.658	2.4	W=	.000838	1.5	T=	.041	10.7
LAT=-42.0	U=	.666	5.5	V=	.706	2.5	W=	.001027	1.2	T=	.067	10.6
LAT=-36.0	U=	.684	5.5	V=	.720	2.5	W=	.001219	.8	T=	.098	10.6
LAT=-30.0	U=	.668	5.5	V=	.686	2.6	W=	.001371	.5	T=	.128	10.7
LAT=-24.0	U=	.626	5.6	V=	.599	2.7	W=	.001391	.1	T=	.152	10.7
LAT=-18.0	U=	.568	5.7	V=	.471	2.9	W=	.001173	11.6	T=	.164	11.0
LAT=-12.0	U=	.516	5.8	V=	.331	3.1	W=	.000726	10.9	T=	.170	11.4
LAT= -6.0	U=	.472	5.7	V=	.196	3.6	W=	.000531	8.2	T=	.175	11.8
LAT= 0.0	U=	.449	5.7	V=	.101	4.6	W=	.001162	6.7	T=	.189	.2
LAT= 6.0	U=	.444	5.7	V=	.062	6.5	W=	.001681	6.2	T=	.207	.4
LAT= 12.0	U=	.447	5.8	V=	.074	8.4	W=	.001630	6.0	T=	.218	.4
LAT= 18.0	U=	.462	5.9	V=	.138	9.3	W=	.000994	5.7	T=	.216	.2
LAT= 24.0	U=	.491	5.8	V=	.236	9.4	W=	.000246	1.2	T=	.209	11.8
LAT= 30.0	U=	.550	5.8	V=	.388	9.3	W=	.001498	11.9	T=	.200	11.3
LAT= 36.0	U=	.656	5.8	V=	.593	8.9	W=	.002466	11.6	T=	.190	10.8
LAT= 42.0	U=	.797	5.7	V=	.822	8.7	W=	.002826	11.4	T=	.171	10.3
LAT= 48.0	U=	.934	5.6	V=	1.009	8.6	W=	.002697	11.2	T=	.144	10.0
LAT= 54.0	U=	1.053	5.4	V=	1.138	8.4	W=	.002141	10.9	T=	.107	9.8
LAT= 60.0	U=	1.084	5.3	V=	1.160	8.4	W=	.001383	10.7	T=	.071	9.8
LAT= 66.0	U=	1.028	5.2	V=	1.066	8.2	W=	.001227	9.9	T=	.040	8.9
LAT= 72.0	U=	.874	5.1	V=	.869	8.1	W=	.000544	10.0	T=	.024	9.6
LAT= 78.0	U=	.622	5.1	V=	.608	8.1	W=	.000050	1.1	T=	.016	11.1

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 69.403 KM

LAT=-78.0	U=	.220	5.2	V=	.221	2.4	W=	.000195	2.6	T=	.004	11.5
LAT=-72.0	U=	.328	5.3	V=	.331	2.3	W=	.000308	2.6	T=	.006	12.0
LAT=-66.0	U=	.435	5.3	V=	.442	2.3	W=	.000406	2.5	T=	.008	12.0
LAT=-60.0	U=	.544	5.2	V=	.556	2.3	W=	.000602	2.1	T=	.017	11.0
LAT=-54.0	U=	.635	5.3	V=	.664	2.3	W=	.000822	1.8	T=	.033	10.6
LAT=-48.0	U=	.713	5.2	V=	.754	2.2	W=	.001060	1.3	T=	.058	10.4
LAT=-42.0	U=	.763	5.1	V=	.807	2.1	W=	.001276	.8	T=	.089	10.2
LAT=-36.0	U=	.777	5.2	V=	.814	2.2	W=	.001552	.1	T=	.123	10.1
LAT=-30.0	U=	.748	5.2	V=	.758	2.3	W=	.001835	11.6	T=	.151	10.1
LAT=-24.0	U=	.687	5.4	V=	.638	2.5	W=	.002001	11.1	T=	.164	10.1
LAT=-18.0	U=	.616	5.6	V=	.492	2.9	W=	.001868	10.5	T=	.157	10.4
LAT=-12.0	U=	.559	5.7	V=	.384	3.6	W=	.001452	9.7	T=	.149	11.0
LAT= -6.0	U=	.521	5.9	V=	.338	4.5	W=	.001177	8.0	T=	.170	12.0
LAT= 0.0	U=	.507	6.0	V=	.294	5.0	W=	.001703	6.4	T=	.228	.6
LAT= 6.0	U=	.509	6.0	V=	.171	5.3	W=	.002300	5.6	T=	.284	.7
LAT= 12.0	U=	.521	6.0	V=	.030	10.8	W=	.002193	5.0	T=	.308	.5
LAT= 18.0	U=	.552	6.1	V=	.240	10.8	W=	.001328	4.3	T=	.296	.2
LAT= 24.0	U=	.606	6.2	V=	.446	10.4	W=	.000878	.8	T=	.264	11.6
LAT= 30.0	U=	.694	6.0	V=	.626	9.9	W=	.002485	11.4	T=	.235	10.9
LAT= 36.0	U=	.828	5.7	V=	.823	9.1	W=	.003813	10.8	T=	.222	10.0
LAT= 42.0	U=	.995	5.3	V=	1.056	8.5	W=	.004298	10.5	T=	.208	9.4
LAT= 48.0	U=	1.160	5.0	V=	1.263	8.1	W=	.004078	10.2	T=	.186	9.0
LAT= 54.0	U=	1.298	4.7	V=	1.406	7.7	W=	.003274	9.8	T=	.144	8.7
LAT= 60.0	U=	1.334	4.4	V=	1.414	7.5	W=	.002077	9.5	T=	.094	8.7
LAT= 66.0	U=	1.234	4.2	V=	1.286	7.3	W=	.002067	9.0	T=	.078	7.6
LAT= 72.0	U=	1.052	4.1	V=	1.037	7.2	W=	.000830	8.6	T=	.031	8.4
LAT= 78.0	U=	.753	4.0	V=	.717	7.0	W=	.000185	4.9	T=	.023	11.1

Z= 75.140 KM

LAT=-78.0	U=	.332	5.2	V=	.309	2.3	W=	.000291	2.4	T=	.013	11.3
LAT=-72.0	U=	.490	5.2	V=	.476	2.2	W=	.000498	2.3	T=	.022	11.3
LAT=-66.0	U=	.637	5.2	V=	.644	2.1	W=	.000685	2.0	T=	.028	11.0
LAT=-60.0	U=	.789	5.0	V=	.806	2.1	W=	.001017	1.6	T=	.050	10.5
LAT=-54.0	U=	.899	5.0	V=	.940	2.0	W=	.001377	1.2	T=	.081	10.0
LAT=-48.0	U=	.964	4.8	V=	1.020	1.8	W=	.001747	.7	T=	.123	9.8
LAT=-42.0	U=	.972	4.7	V=	1.023	1.7	W=	.002061	12.0	T=	.163	9.5
LAT=-36.0	U=	.916	4.7	V=	.938	1.7	W=	.002470	11.3	T=	.199	9.2
LAT=-30.0	U=	.805	4.7	V=	.758	1.8	W=	.002881	10.7	T=	.216	9.0
LAT=-24.0	U=	.662	5.1	V=	.538	2.2	W=	.003130	10.1	T=	.194	8.9
LAT=-18.0	U=	.609	5.5	V=	.470	3.5	W=	.002947	9.4	T=	.123	9.1
LAT=-12.0	U=	.599	5.9	V=	.606	4.4	W=	.002369	8.6	T=	.081	11.3
LAT= -6.0	U=	.629	6.2	V=	.746	4.7	W=	.001869	7.0	T=	.206	.7
LAT= 0.0	U=	.652	6.3	V=	.695	4.5	W=	.002366	5.2	T=	.360	.8
LAT= 6.0	U=	.667	6.2	V=	.408	3.9	W=	.003059	4.2	T=	.467	.5
LAT= 12.0	U=	706	6.3	V=	.246	.5	W=	.002943	3.5	T=	.491	.2
LAT= 18.0	U=	.784	6.3	V=	.642	11.0	W=	.002070	2.4	T=	.442	11.9
LAT= 24.0	U=	.895	6.2	V=	1.034	10.4	W=	.002101	11.9	T=	.347	11.2
LAT= 30.0	U=	1.013	5.9	V=	1.240	9.8	W=	.003815	10.6	T=	.267	10.2
LAT= 36.0	U=	1.119	5.5	V=	1.301	9.0	W=	.005239	9.9	T=	.244	9.0
LAT= 42.0	U=	1.244	4.9	V=	1.379	8.1	W=	.005655	9.5	T=	.242	8.2
LAT= 48.0	U=	1.397	4.3	V=	1.538	7.3	W=	.005256	9.1	T=	.229	7.6
LAT= 54.0	U=	1.557	3.7	V=	1.681	6.6	W=	.004194	8.6	T=	.184	7.3
LAT= 60.0	U=	1.612	3.4	V=	1.698	6.3	W=	.002663	8.0	T=	.110	7.3
LAT= 66.0	U=	1.515	2.9	V=	1.537	6.0	W=	.002782	8.2	T=	.155	6.5
LAT= 72.0	U=	1.250	2.9	V=	1.238	5.9	W=	.001165	6.9	T=	.029	6.5
LAT= 78.0	U=	.874	2.9	V=	.872	5.6	W=	.000809	4.5	T=	.041	12.0

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 81.010 KM												
LAT=-78.0	U=	.850	4.9	V=	.785	1.9	W=	.000292	.5	T=	.019	9.2
LAT=-72.0	U=	1.214	4.8	V=	1.162	1.8	W=	.000588	.5	T=	.036	9.1
LAT=-66.0	U=	1.474	4.6	V=	1.484	1.6	W=	.000967	.1	T=	.061	8.7
LAT=-60.0	U=	1.668	4.4	V=	1.710	1.5	W=	.001491	11.7	T=	.111	8.4
LAT=-54.0	U=	1.712	4.2	V=	1.791	1.2	W=	.002261	11.2	T=	.186	8.2
LAT=-48.0	U=	1.613	4.0	V=	1.699	1.0	W=	.003168	10.8	T=	.271	8.0
LAT=-42.0	U=	1.400	3.8	V=	1.431	.7	W=	.003929	10.3	T=	.340	7.8
LAT=-36.0	U=	1.074	3.6	V=	1.001	.4	W=	.004580	9.9	T=	.381	7.6
LAT=-30.0	U=	.704	3.8	V=	.432	.5	W=	.004774	9.4	T=	.359	7.3
LAT=-24.0	U=	.478	4.8	V=	.353	4.2	W=	.004425	8.7	T=	.249	6.8
LAT=-18.0	U=	.607	6.0	V=	1.016	4.5	W=	.003607	7.8	T=	.086	4.8
LAT=-12.0	U=	.824	6.4	V=	1.478	4.3	W=	.002837	6.6	T=	.218	1.4
LAT= -6.0	U=	.974	6.4	V=	1.679	4.0	W=	.002793	4.9	T=	.476	.8
LAT= 0.0	U=	1.016	6.3	V=	1.418	3.5	W=	.003545	3.5	T=	.681	.4
LAT= 6.0	U=	1.040	6.3	V=	.807	2.3	W=	.004264	2.4	T=	.781	12.0
LAT= 12.0	U=	1.146	6.2	V=	.849	11.5	W=	.004382	1.4	T=	.750	11.5
LAT= 18.0	U=	1.306	6.1	V=	1.552	10.3	W=	.003963	.4	T=	.633	11.1
LAT= 24.0	U=	1.486	6.0	V=	2.112	9.7	W=	.003817	10.9	T=	.430	10.5
LAT= 30.0	U=	1.565	5.6	V=	2.198	9.2	W=	.004759	9.4	T=	.230	9.4
LAT= 36.0	U=	1.496	5.0	V=	1.929	8.5	W=	.006034	8.4	T=	.161	7.1
LAT= 42.0	U=	1.409	4.2	V=	1.632	7.4	W=	.006666	7.8	T=	.221	5.8
LAT= 48.0	U=	1.443	3.3	V=	1.618	6.4	W=	.006536	7.4	T=	.259	5.2
LAT= 54.0	U=	1.549	2.6	V=	1.674	5.6	W=	.005459	7.0	T=	.232	4.9
LAT= 60.0	U=	1.540	2.1	V=	1.636	4.9	W=	.003881	6.3	T=	.143	4.3
LAT= 66.0	U=	1.591	1.4	V=	1.382	4.6	W=	.003076	7.3	T=	.256	5.5
LAT= 72.0	U=	1.001	1.4	V=	1.065	4.3	W=	.001874	5.1	T=	.075	2.6
LAT= 78.0	U=	.573	1.4	V=	.834	3.9	W=	.002009	3.8	T=	.140	.6
Z= 87.062 KM												
LAT=-78.0	U=	1.354	2.1	V=	1.201	11.1	W=	.000995	9.7	T=	.096	6.6
LAT=-72.0	U=	2.015	2.1	V=	1.806	11.1	W=	.001928	10.0	T=	.180	6.9
LAT=-66.0	U=	2.586	2.0	V=	2.550	11.1	W=	.002721	10.0	T=	.251	6.9
LAT=-60.0	U=	3.013	2.0	V=	3.045	11.0	W=	.004027	9.5	T=	.387	6.5
LAT=-54.0	U=	3.124	1.9	V=	3.216	10.9	W=	.005782	9.1	T=	.580	6.2
LAT=-48.0	U=	2.784	1.9	V=	2.893	10.9	W=	.007547	8.6	T=	.764	5.8
LAT=-42.0	U=	2.085	1.9	V=	2.052	10.9	W=	.008923	8.1	T=	.879	5.5
LAT=-36.0	U=	1.099	2.0	V=	.754	11.3	W=	.009877	7.7	T=	.919	5.0
LAT=-30.0	U=	.332	4.4	V=	.908	3.9	W=	.009735	7.2	T=	.820	4.5
LAT=-24.0	U=	.937	6.5	V=	2.279	4.1	W=	.008360	6.5	T=	.646	3.5
LAT=-18.0	U=	1.422	6.5	V=	3.072	4.0	W=	.006155	5.4	T=	.606	1.8
LAT=-12.0	U=	1.652	6.4	V=	3.097	3.7	W=	.005119	3.8	T=	.825	.5
LAT= -6.0	U=	1.678	6.2	V=	2.474	3.1	W=	.006360	2.1	T=	1.104	11.7
LAT= 0.0	U=	1.668	6.0	V=	1.627	2.0	W=	.008438	1.1	T=	1.271	11.1
LAT= 6.0	U=	1.720	6.0	V=	1.478	12.0	W=	.009294	.2	T=	1.235	10.6
LAT= 12.0	U=	1.853	5.8	V=	1.966	10.5	W=	.008438	11.5	T=	.993	10.2
LAT= 18.0	U=	1.988	5.6	V=	2.502	9.6	W=	.006501	10.5	T=	.653	10.0
LAT= 24.0	U=	2.106	5.4	V=	2.835	8.8	W=	.005590	8.8	T=	.218	9.9
LAT= 30.0	U=	2.117	5.0	V=	2.954	8.1	W=	.007007	7.3	T=	.199	2.5
LAT= 36.0	U=	1.927	4.6	V=	2.668	7.6	W=	.008582	6.4	T=	.447	2.6
LAT= 42.0	U=	1.439	4.2	V=	1.934	7.2	W=	.008620	5.8	T=	.536	2.4
LAT= 48.0	U=	.743	3.8	V=	.964	6.9	W=	.007577	5.3	T=	.513	2.2
LAT= 54.0	U=	.181	10.9	V=	.190	1.6	W=	.005465	4.8	T=	.405	1.9
LAT= 60.0	U=	.957	9.7	V=	1.184	.8	W=	.004111	4.0	T=	.340	1.4
LAT= 66.0	U=	1.764	10.2	V=	1.600	.5	W=	.000165	4.4	T=	.186	5.0
LAT= 72.0	U=	1.697	9.0	V=	1.664	.4	W=	.002844	3.0	T=	.245	.7
LAT= 78.0	U=	1.408	8.6	V=	1.386	.7	W=	.003348	3.2	T=	.356	.5

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 93.363 KM

LAT=-78.0	U=	3.968	.4	V=	3.698	9.5	W=	.001807	6.8	T=	.154 / 4.0
LAT=-72.0	U=	5.562	.3	V=	5.299	9.4	W=	.003339	6.7	T=	.267 / 4.0
LAT=-66.0	U=	6.439	.2	V=	6.477	9.2	W=	.004648	6.5	T=	.359 / 3.9
LAT=-60.0	U=	6.746	12.0	V=	6.989	9.0	W=	.008289	6.2	T=	.649 / 3.6
LAT=-54.0	U=	6.261	11.7	V=	6.606	8.7	W=	.013137	6.1	T=	1.032 / 3.4
LAT=-48.0	U=	4.945	11.5	V=	5.270	8.4	W=	.018345	5.8	T=	1.445 / 3.2
LAT=-42.0	U=	3.247	11.0	V=	3.306	7.8	W=	.022221	5.7	T=	1.747 / 3.0
LAT=-36.0	U=	1.732	9.6	V=	2.056	5.6	W=	.023921	5.5	T=	1.902 / 2.8
LAT=-30.0	U=	1.737	7.4	V=	3.523	3.7	W=	.021632	5.2	T=	1.762 / 2.5
LAT=-24.0	U=	2.370	6.4	V=	5.086	3.0	W=	.015419	4.7	T=	1.375 / 1.8
LAT=-18.0	U=	2.562	5.9	V=	5.450	2.5	W=	.008819	3.4	T=	1.087 / .5
LAT=-12.0	U=	2.543	5.6	V=	4.695	2.0	W=	.009417	1.2	T=	1.257 / 11.1
LAT= -6.0	U=	2.374	5.4	V=	3.167	1.1	W=	.014932	.1	T=	1.636 / 10.3
LAT= 0.0	U=	2.435	5.3	V=	2.009	11.5	W=	.017229	11.6	T=	1.757 / 9.9
LAT= 6.0	U=	2.709	5.3	V=	2.268	9.5	W=	.015388	10.9	T=	1.481 / 9.6
LAT= 12.0	U=	2.938	5.1	V=	2.865	8.3	W=	.011268	10.0	T=	.898 / 9.5
LAT= 18.0	U=	2.966	5.0	V=	3.272	7.7	W=	.009032	8.6	T=	.290 / 10.1
LAT= 24.0	U=	2.776	4.8	V=	3.218	7.2	W=	.009809	7.2	T=	.426 / 1.9
LAT= 30.0	U=	2.420	4.7	V=	2.744	7.1	W=	.011051	6.2	T=	.808 / 2.0
LAT= 36.0	U=	2.177	5.2	V=	2.210	7.7	W=	.010360	5.5	T=	.916 / 1.7
LAT= 42.0	U=	2.481	6.0	V=	2.543	8.9	W=	.008308	4.7	T=	.828 / 1.3
LAT= 48.0	U=	3.232	6.5	V=	3.515	9.5	W=	.006657	3.8	T=	.674 / .8
LAT= 54.0	U=	4.109	6.7	V=	4.428	9.7	W=	.005503	2.7	T=	.526 / 12.0
LAT= 60.0	U=	4.786	6.7	V=	4.707	9.7	W=	.005342	2.0	T=	.507 / 11.5
LAT= 66.0	U=	3.195	6.8	V=	4.476	9.6	W=	.003355	1.0	T=	.201 / 8.7
LAT= 72.0	U=	4.730	6.5	V=	3.709	9.5	W=	.003383	1.1	T=	.310 / 10.9
LAT= 78.0	U=	4.155	6.5	V=	2.032	9.4	W=	.002403	1.6	T=	.368 / 11.6

Z= 96.638 KM

LAT=-78.0	U=	6.426	10.2	V=	5.517	7.2	W=	.003187	5.0	T=	.325 / 2.3
LAT=-72.0	U=	9.310	10.1	V=	8.492	7.1	W=	.005829	5.0	T=	.581 / 2.2
LAT=-66.0	U=	11.281	9.9	V=	10.917	7.1	W=	.008012	4.8	T=	.796 / 1.9
LAT=-60.0	U=	12.607	9.9	V=	12.461	7.0	W=	.013372	4.6	T=	1.380 / 1.9
LAT=-54.0	U=	12.440	9.8	V=	12.638	6.8	W=	.019866	4.6	T=	2.075 / 1.9
LAT=-48.0	U=	10.651	9.6	V=	11.059	6.6	W=	.026855	4.5	T=	2.827 / 1.8
LAT=-42.0	U=	7.918	9.3	V=	8.035	6.3	W=	.031834	4.4	T=	3.350 / 1.7
LAT=-36.0	U=	4.865	8.5	V=	4.379	5.3	W=	.033856	4.3	T=	3.563 / 1.5
LAT=-30.0	U=	3.372	7.0	V=	4.437	2.9	W=	.030389	4.2	T=	3.221 / 1.4
LAT=-24.0	U=	3.996	5.7	V=	7.420	2.0	W=	.021035	3.9	T=	2.391 / .9
LAT=-18.0	U=	4.443	5.2	V=	8.777	1.7	W=	.008932	2.8	T=	1.537 / 11.9
LAT=-12.0	U=	4.304	5.0	V=	7.784	1.5	W=	.009553	11.7	T=	1.409 / 10.4
LAT= -6.0	U=	3.589	4.9	V=	4.583	1.2	W=	.019061	10.9	T=	1.824 / 9.4
LAT= 0.0	U=	3.007	4.9	V=	.882	11.0	W=	.023039	10.7	T=	1.940 / 9.1
LAT= 6.0	U=	2.857	5.0	V=	3.452	8.0	W=	.019664	10.4	T=	1.551 / 9.1
LAT= 12.0	U=	2.880	5.0	V=	4.922	7.7	W=	.011419	10.0	T=	.863 / 9.6
LAT= 18.0	U=	2.628	4.9	V=	4.565	7.5	W=	.005302	8.2	T=	.409 / 11.5
LAT= 24.0	U=	2.023	4.8	V=	2.653	7.2	W=	.009779	6.1	T=	.706 / 1.5
LAT= 30.0	U=	1.090	4.9	V=	.657	6.1	W=	.012972	5.7	T=	.885 / 1.8
LAT= 36.0	U=	.715	6.6	V=	.550	.7	W=	.011184	5.8	T=	.748 / 1.8
LAT= 42.0	U=	1.550	7.0	V=	1.403	10.6	W=	.006148	6.0	T=	.448 / 1.8
LAT= 48.0	U=	2.738	6.7	V=	2.845	9.7	W=	.001302	7.4	T=	.167 / 1.4
LAT= 54.0	U=	4.246	6.3	V=	4.546	9.3	W=	.003752	11.3	T=	.073 / 9.4
LAT= 60.0	U=	5.443	6.2	V=	5.483	9.2	W=	.005493	11.8	T=	.125 / 9.5
LAT= 66.0	U=	4.751	6.0	V=	5.628	9.1	W=	.004964	.1	T=	.258 / 7.1
LAT= 72.0	U=	5.222	6.0	V=	4.641	9.0	W=	.004233	11.3	T=	.071 / 8.8
LAT= 78.0	U=	4.174	6.0	V=	2.846	8.7	W=	.001739	10.9	T=	.123 / .2

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 100.017 KM

LAT=-78.0	U=	7.995 /	8.5	V=	6.982 /	5.3	W=	.004392 /	3.7	T=	.464 /	.9
LAT=-72.0	U=	11.720 /	8.4	V=	10.750 /	5.3	W=	.006975 /	3.7	T=	.717 /	.8
LAT=-66.0	U=	14.523 /	8.3	V=	13.930 /	5.3	W=	.008824 /	3.5	T=	.904 /	.4
LAT=-60.0	U=	16.627 /	8.3	V=	16.199 /	5.2	W=	.015009 /	3.3	T=	1.612 /	.5
LAT=-54.0	U=	16.876 /	8.2	V=	16.987 /	5.2	W=	.022415 /	3.2	T=	2.442 /	.5
LAT=-48.0	U=	15.293 /	8.1	V=	15.783 /	5.1	W=	.030960 /	3.1	T=	3.420 /	.4
LAT=-42.0	U=	12.338 /	8.0	V=	12.650 /	5.0	W=	.037758 /	3.0	T=	4.193 /	.4
LAT=-36.0	U=	8.422 /	7.7	V=	7.922 /	4.6	W=	.041656 /	2.9	T=	4.625 /	.3
LAT=-30.0	U=	4.857 /	7.0	V=	3.832 /	3.1	W=	.039267 /	2.9	T=	4.396 /	.2
LAT=-24.0	U=	3.534 /	5.5	V=	5.776 /	.8	W=	.029019 /	2.7	T=	3.432 /	11.9
LAT=-18.0	U=	4.120 /	4.5	V=	8.594 /	.4	W=	.012651 /	2.2	T=	2.054 /	11.4
LAT=-12.0	U=	4.499 /	4.3	V=	8.890 /	.4	W=	.008345 /	10.4	T=	1.196 /	9.9
LAT= -6.0	U=	4.199 /	4.4	V=	6.500 /	.5	W=	.022799 /	9.5	T=	1.549 /	8.2
LAT= 0.0	U=	3.621 /	4.5	V=	2.331 /	1.4	W=	.030298 /	9.5	T=	1.890 /	7.9
LAT= 6.0	U=	3.158 /	4.7	V=	3.072 /	5.4	W=	.027170 /	9.6	T=	1.600 /	8.2
LAT= 12.0	U=	2.897 /	4.7	V=	5.776 /	6.2	W=	.015955 /	9.9	T=	1.001 /	9.1
LAT= 18.0	U=	2.641 /	4.8	V=	6.263 /	6.6	W=	.003973 /	11.0	T=	.816 /	11.0
LAT= 24.0	U=	2.341 /	5.1	V=	4.669 /	7.3	W=	.008714 /	3.5	T=	1.144 /	.4
LAT= 30.0	U=	2.119 /	6.1	V=	3.029 /	8.9	W=	.013677 /	4.3	T=	1.208 /	1.1
LAT= 36.0	U=	2.465 /	7.2	V=	3.523 /	10.6	W=	.013232 /	5.2	T=	.931 /	1.7
LAT= 42.0	U=	2.631 /	7.7	V=	3.580 /	11.1	W=	.011594 /	6.5	T=	.558 /	2.6
LAT= 48.0	U=	2.055 /	7.5	V=	2.467 /	11.1	W=	.011583 /	7.6	T=	.383 /	4.2
LAT= 54.0	U=	1.370 /	5.8	V=	1.060 /	8.9	W=	.011623 /	8.7	T=	.354 /	5.6
LAT= 60.0	U=	2.643 /	4.3	V=	2.690 /	7.1	W=	.009884 /	9.5	T=	.228 /	6.4
LAT= 66.0	U=	3.546 /	3.6	V=	4.041 /	7.1	W=	.006455 /	10.1	T=	.368 /	6.4
LAT= 72.0	U=	4.269 /	4.2	V=	4.061 /	7.0	W=	.006601 /	10.1	T=	.120 /	6.8
LAT= 78.0	U=	3.533 /	4.4	V=	3.026 /	6.7	W=	.003260 /	9.9	T=	.089 /	.6

Z= 103.521 KM

LAT=-78.0	U=	9.194 /	7.0	V=	7.761 /	3.9	W=	.004983 /	2.6	T=	.625 /	11.6
LAT=-72.0	U=	13.486 /	6.9	V=	12.161 /	3.9	W=	.007116 /	2.5	T=	.837 /	11.5
LAT=-66.0	U=	16.780 /	6.8	V=	16.017 /	3.8	W=	.008136 /	2.2	T=	.902 /	11.1
LAT=-60.0	U=	19.790 /	6.8	V=	19.093 /	3.8	W=	.014757 /	2.0	T=	1.749 /	11.2
LAT=-54.0	U=	20.703 /	6.7	V=	20.724 /	3.8	W=	.022490 /	1.8	T=	2.714 /	11.1
LAT=-48.0	U=	19.715 /	6.7	V=	20.266 /	3.7	W=	.031995 /	1.7	T=	3.935 /	11.1
LAT=-42.0	U=	17.005 /	6.7	V=	17.545 /	3.6	W=	.040289 /	1.6	T=	4.980 /	11.0
LAT=-36.0	U=	12.820 /	6.6	V=	12.649 /	3.5	W=	.046149 /	1.5	T=	5.703 /	11.0
LAT=-30.0	U=	8.176 /	6.4	V=	6.466 /	3.1	W=	.045838 /	1.5	T=	5.680 /	11.0
LAT=-24.0	U=	4.384 /	5.3	V=	3.071 /	.4	W=	.036873 /	1.4	T=	4.711 /	10.9
LAT=-18.0	U=	2.937 /	4.4	V=	6.585 /	11.0	W=	.019985 /	1.2	T=	2.990 /	10.8
LAT=-12.0	U=	3.349 /	3.6	V=	8.383 /	10.8	W=	.005556 /	10.6	T=	1.271 /	10.1
LAT= -6.0	U=	3.740 /	3.6	V=	7.333 /	11.0	W=	.021050 /	8.4	T=	1.004 /	6.9
LAT= 0.0	U=	3.722 /	4.0	V=	4.037 /	12.0	W=	.032889 /	8.4	T=	1.778 /	6.4
LAT= 6.0	U=	3.386 /	4.3	V=	3.337 /	2.9	W=	.033316 /	8.6	T=	1.751 /	6.7
LAT= 12.0	U=	2.869 /	4.4	V=	6.036 /	4.3	W=	.024158 /	9.2	T=	1.239 /	7.7
LAT= 18.0	U=	2.585 /	4.5	V=	6.950 /	5.1	W=	.014656 /	10.4	T=	1.090 /	9.5
LAT= 24.0	U=	2.647 /	4.8	V=	6.542 /	6.2	W=	.013051 /	.6	T=	1.474 /	11.0
LAT= 30.0	U=	3.398 /	5.5	V=	6.359 /	7.8	W=	.015604 /	2.2	T=	1.588 /	12.0
LAT= 36.0	U=	4.526 /	6.4	V=	7.224 /	9.0	W=	.015060 /	3.6	T=	1.378 /	1.0
LAT= 42.0	U=	5.202 /	7.1	V=	7.283 /	10.1	W=	.016245 /	5.1	T=	1.158 /	2.1
LAT= 48.0	U=	4.929 /	7.9	V=	6.755 /	11.0	W=	.018380 /	6.1	T=	1.035 /	3.2
LAT= 54.0	U=	4.524 /	9.1	V=	5.542 /	.1	W=	.018882 /	7.0	T=	.875 /	4.1
LAT= 60.0	U=	4.314 /	10.4	V=	5.068 /	1.5	W=	.015261 /	7.7	T=	.549 /	4.6
LAT= 66.0	U=	5.173 /	11.5	V=	4.505 /	2.5	W=	.009385 /	7.9	T=	.517 /	5.5
LAT= 72.0	U=	3.818 /	.1	V=	4.169 /	3.1	W=	.008601 /	8.8	T=	.258 /	5.9
LAT= 78.0	U=	2.418 /	.5	V=	3.788 /	3.5	W=	.005163 /	9.4	T=	.029 /	11.3

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 107.177 KM

LAT=-78.0	U=	9.698	5.6	V=	7.790	2.6	W=	.004937	1.0	T=	.784	10.0
LAT=-72.0	U=	14.121	5.5	V=	12.451	2.5	W=	.006602	1.1	T=	.983	10.1
LAT=-66.0	U=	17.253	5.4	V=	16.541	2.5	W=	.006725	1.0	T=	.906	10.2
LAT=-60.0	U=	20.775	5.3	V=	19.974	2.5	W=	.013315	.7	T=	1.890	10.0
LAT=-54.0	U=	22.158	5.3	V=	22.697	2.4	W=	.020776	.5	T=	2.945	9.8
LAT=-48.0	U=	21.870	5.3	V=	22.313	2.4	W=	.030524	.3	T=	4.343	9.7
LAT=-42.0	U=	19.821	5.4	V=	20.290	2.4	W=	.039761	.2	T=	5.620	9.6
LAT=-36.0	U=	16.174	5.5	V=	16.013	2.4	W=	.047195	.1	T=	6.614	9.6
LAT=-30.0	U=	11.698	5.4	V=	9.803	2.4	W=	.049269	.1	T=	6.870	9.6
LAT=-24.0	U=	7.314	5.5	V=	3.112	2.2	W=	.043150	12.0	T=	6.082	9.6
LAT=-18.0	U=	3.894	5.3	V=	2.911	9.2	W=	.028791	11.9	T=	4.321	9.6
LAT=-12.0	U=	2.113	4.4	V=	6.247	9.1	W=	.012129	11.1	T=	2.232	9.5
LAT= -6.0	U=	2.274	3.4	V=	6.924	9.3	W=	.013771	7.8	T=	.266	7.2
LAT= 0.0	U=	2.859	3.5	V=	4.935	10.1	W=	.027373	7.4	T=	1.475	4.5
LAT= 6.0	U=	3.019	3.8	V=	3.095	.2	W=	.032469	7.6	T=	1.922	4.9
LAT= 12.0	U=	2.656	4.0	V=	4.787	2.4	W=	.028692	8.2	T=	1.601	5.9
LAT= 18.0	U=	2.374	4.2	V=	6.239	3.5	W=	.023099	9.2	T=	1.359	7.4
LAT= 24.0	U=	2.390	4.4	V=	6.764	4.6	W=	.021115	10.7	T=	1.672	9.1
LAT= 30.0	U=	3.401	4.6	V=	7.534	6.2	W=	.021507	.1	T=	1.950	10.3
LAT= 36.0	U=	5.177	5.3	V=	9.014	7.5	W=	.019155	1.3	T=	1.907	11.4
LAT= 42.0	U=	6.942	6.0	V=	10.085	8.7	W=	.017350	2.9	T=	1.794	.6
LAT= 48.0	U=	8.082	6.8	V=	10.911	9.6	W=	.018926	4.1	T=	1.743	1.5
LAT= 54.0	U=	9.316	7.7	V=	11.248	10.6	W=	.019729	5.1	T=	1.582	2.4
LAT= 60.0	U=	10.100	8.4	V=	11.127	11.4	W=	.016602	5.9	T=	1.210	3.1
LAT= 66.0	U=	9.713	9.2	V=	10.198	11.9	W=	.013221	6.1	T=	.983	3.9
LAT= 72.0	U=	8.269	9.3	V=	8.259	.4	W=	.008690	7.2	T=	.603	4.3
LAT= 78.0	U=	5.776	9.4	V=	6.033	1.0	W=	.005498	8.7	T=	.180	5.5

Z= 111.019 KM

LAT=-78.0	U=	9.098	4.4	V=	7.092	1.5	W=	.004321	11.3	T=	.807	8.3
LAT=-72.0	U=	13.135	4.3	V=	11.453	1.4	W=	.005492	11.6	T=	1.003	8.7
LAT=-66.0	U=	15.783	4.2	V=	15.232	1.3	W=	.005284	11.8	T=	.967	9.3
LAT=-60.0	U=	19.206	4.3	V=	18.487	1.3	W=	.011524	11.4	T=	1.992	8.8
LAT=-54.0	U=	20.675	4.2	V=	20.641	1.2	W=	.018417	11.2	T=	3.052	8.6
LAT=-48.0	U=	20.907	4.2	V=	21.226	1.1	W=	.028257	11.0	T=	4.539	8.4
LAT=-42.0	U=	19.659	4.3	V=	19.895	1.2	W=	.038147	10.9	T=	6.012	8.2
LAT=-36.0	U=	16.998	4.4	V=	16.651	1.3	W=	.047080	10.7	T=	7.265	8.2
LAT=-30.0	U=	13.534	4.4	V=	11.672	1.4	W=	.051692	10.7	T=	7.884	8.2
LAT=-24.0	U=	9.880	4.6	V=	5.856	1.8	W=	.049156	10.7	T=	7.476	8.2
LAT=-18.0	U=	6.605	4.8	V=	1.652	4.3	W=	.038810	10.6	T=	5.995	8.2
LAT=-12.0	U=	4.150	4.9	V=	4.059	6.8	W=	.024453	10.3	T=	3.943	8.2
LAT= -6.0	U=	2.603	4.5	V=	5.691	7.4	W=	.011493	8.8	T=	1.568	8.3
LAT= 0.0	U=	2.256	4.0	V=	4.815	8.0	W=	.016357	6.9	T=	.396	3.4
LAT= 6.0	U=	2.456	3.7	V=	2.713	9.3	W=	.023786	6.8	T=	1.387	3.3
LAT= 12.0	U=	2.428	4.0	V=	2.469	.3	W=	.025357	7.4	T=	1.548	4.3
LAT= 18.0	U=	2.306	4.3	V=	3.720	1.9	W=	.024532	8.3	T=	1.469	5.6
LAT= 24.0	U=	2.198	4.4	V=	4.906	3.3	W=	.026054	9.4	T=	1.930	7.3
LAT= 30.0	U=	2.752	4.3	V=	6.207	4.7	W=	.028142	10.6	T=	2.397	8.4
LAT= 36.0	U=	4.385	4.3	V=	8.205	6.1	W=	.026637	11.5	T=	2.529	9.4
LAT= 42.0	U=	6.500	4.9	V=	10.159	7.2	W=	.022604	.7	T=	2.472	10.5
LAT= 48.0	U=	8.255	5.5	V=	11.676	8.1	W=	.020245	1.8	T=	2.416	11.5
LAT= 54.0	U=	10.050	6.1	V=	12.679	9.0	W=	.018679	3.1	T=	2.358	.4
LAT= 60.0	U=	11.515	6.8	V=	12.820	9.8	W=	.014428	4.0	T=	2.058	1.1
LAT= 66.0	U=	10.661	7.5	V=	12.295	10.4	W=	.016056	4.5	T=	1.921	1.8
LAT= 72.0	U=	10.449	7.7	V=	10.349	10.7	W=	.007452	5.2	T=	1.081	1.9
LAT= 78.0	U=	7.920	7.8	V=	7.211	11.3	W=	.003452	8.3	T=	.210	2.9

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 115.091 KM

LAT=-78.0	U=	7.523 /	3.3	V=	5.902 /	.6	W=	.003915 /	9.7	T=	.728 /	6.7
LAT=-72.0	U=	10.842 /	3.2	V=	9.515 /	.4	W=	.004854 /	10.1	T=	.936 /	7.4
LAT=-66.0	U=	12.976 /	3.2	V=	12.635 /	.3	W=	.004809 /	10.7	T=	1.083 /	8.3
LAT=-60.0	U=	15.900 /	3.2	V=	15.366 /	.3	W=	.010955 /	10.2	T=	2.101 /	7.6
LAT=-54.0	U=	17.209 /	3.1	V=	17.254 /	.2	W=	.017499 /	10.0	T=	3.105 /	7.3
LAT=-48.0	U=	17.738 /	3.2	V=	17.960 /	.2	W=	.027532 /	9.8	T=	4.645 /	7.2
LAT=-42.0	U=	17.160 /	3.3	V=	17.198 /	.2	W=	.038053 /	9.7	T=	6.219 /	7.0
LAT=-36.0	U=	15.496 /	3.4	V=	14.957 /	.3	W=	.048131 /	9.6	T=	7.688 /	6.9
LAT=-30.0	U=	13.208 /	3.5	V=	11.338 /	.5	W=	.054821 /	9.6	T=	8.658 /	6.8
LAT=-24.0	U=	10.633 /	3.7	V=	7.036 /	.9	W=	.055329 /	9.5	T=	8.706 /	6.8
LAT=-18.0	U=	8.161 /	3.9	V=	3.592 /	2.2	W=	.048590 /	9.4	T=	7.695 /	6.8
LAT=-12.0	U=	6.046 /	4.0	V=	3.646 /	4.3	W=	.037043 /	9.3	T=	5.979 /	6.9
LAT= -6.0	U=	4.359 /	4.2	V=	4.944 /	5.3	W=	.022299 /	9.1	T=	3.743 /	7.0
LAT= 0.0	U=	3.305 /	4.1	V=	4.851 /	5.9	W=	.011489 /	8.1	T=	1.688 /	7.3
LAT= 6.0	U=	2.908 /	3.9	V=	3.290 /	6.5	W=	.012698 /	6.7	T=	.355 /	7.1
LAT= 12.0	U=	2.820 /	3.9	V=	1.116 /	7.6	W=	.017114 /	6.9	T=	.534 /	4.6
LAT= 18.0	U=	2.768 /	4.0	V=	.716 /	.9	W=	.020390 /	7.7	T=	1.100 /	5.5
LAT= 24.0	U=	2.747 /	4.2	V=	2.347 /	2.6	W=	.026383 /	8.7	T=	2.057 /	6.4
LAT= 30.0	U=	2.907 /	4.1	V=	4.262 /	4.0	W=	.031654 /	9.6	T=	2.908 /	7.2
LAT= 36.0	U=	3.826 /	3.8	V=	6.609 /	5.0	W=	.032889 /	10.4	T=	3.359 /	8.0
LAT= 42.0	U=	5.493 /	4.0	V=	8.820 /	6.0	W=	.030176 /	11.2	T=	3.472 /	8.8
LAT= 48.0	U=	7.045 /	4.4	V=	10.443 /	6.8	W=	.026441 /	.1	T=	3.435 /	9.6
LAT= 54.0	U=	8.679 /	4.9	V=	11.562 /	7.5	W=	.022453 /	1.2	T=	3.398 /	10.4
LAT= 60.0	U=	10.288 /	5.4	V=	11.631 /	8.3	W=	.016357 /	1.9	T=	3.107 /	10.9
LAT= 66.0	U=	9.060 /	6.2	V=	11.230 /	8.9	W=	.018928 /	3.0	T=	3.014 /	11.8
LAT= 72.0	U=	9.825 /	6.3	V=	9.824 /	9.4	W=	.007848 /	3.1	T=	1.660 /	11.7
LAT= 78.0	U=	7.839 /	6.4	V=	7.084 /	10.0	W=	.002055 /	9.5	T=	.340 /	10.7

Z= 119.451 KM

LAT=-78.0	U=	5.865 /	2.3	V=	4.803 /	11.7	W=	.003955 /	8.2	T=	.642 /	5.2
LAT=-72.0	U=	8.480 /	2.3	V=	7.609 /	11.5	W=	.004983 /	8.8	T=	.891 /	6.2
LAT=-66.0	U=	10.237 /	2.3	V=	10.054 /	11.4	W=	.005512 /	9.6	T=	1.269 /	7.2
LAT=-60.0	U=	12.578 /	2.3	V=	12.205 /	11.4	W=	.011875 /	9.2	T=	2.255 /	6.7
LAT=-54.0	U=	13.638 /	2.3	V=	13.730 /	11.3	W=	.018388 /	9.0	T=	3.192 /	6.4
LAT=-48.0	U=	14.279 /	2.2	V=	14.390 /	11.3	W=	.028688 /	8.8	T=	4.684 /	6.2
LAT=-42.0	U=	14.097 /	2.3	V=	13.976 /	11.3	W=	.039742 /	8.7	T=	6.254 /	6.0
LAT=-36.0	U=	13.171 /	2.5	V=	12.448 /	11.3	W=	.050458 /	8.7	T=	7.774 /	5.8
LAT=-30.0	U=	11.797 /	2.6	V=	9.915 /	11.6	W=	.058494 /	8.6	T=	8.935 /	5.7
LAT=-24.0	U=	10.149 /	2.8	V=	6.895 /	12.0	W=	.061032 /	8.6	T=	9.327 /	5.7
LAT=-18.0	U=	8.436 /	3.0	V=	4.485 /	1.1	W=	.056875 /	8.6	T=	8.797 /	5.7
LAT=-12.0	U=	6.867 /	3.3	V=	4.168 /	2.6	W=	.047553 /	8.6	T=	7.503 /	5.8
LAT= -6.0	U=	5.424 /	3.4	V=	5.035 /	3.6	W=	.034181 /	8.7	T=	5.698 /	6.1
LAT= 0.0	U=	4.337 /	3.5	V=	5.254 /	4.3	W=	.020773 /	8.7	T=	3.856 /	6.4
LAT= 6.0	U=	3.704 /	3.4	V=	4.468 /	4.7	W=	.012000 /	8.3	T=	2.487 /	6.8
LAT= 12.0	U=	3.448 /	3.4	V=	3.050 /	5.0	W=	.011930 /	7.8	T=	1.798 /	6.9
LAT= 18.0	U=	3.353 /	3.5	V=	2.016 /	4.9	W=	.016656 /	7.9	T=	1.819 /	6.6
LAT= 24.0	U=	3.374 /	3.6	V=	1.987 /	3.9	W=	.025025 /	8.4	T=	2.534 /	6.4
LAT= 30.0	U=	3.470 /	3.6	V=	3.526 /	3.9	W=	.032720 /	9.0	T=	3.442 /	6.7
LAT= 36.0	U=	3.983 /	3.4	V=	5.674 /	4.4	W=	.036754 /	9.6	T=	4.136 /	7.2
LAT= 42.0	U=	5.098 /	3.4	V=	7.798 /	5.0	W=	.036076 /	10.4	T=	4.472 /	7.8
LAT= 48.0	U=	6.277 /	3.6	V=	9.275 /	5.7	W=	.033395 /	11.2	T=	4.570 /	8.4
LAT= 54.0	U=	7.595 /	3.9	V=	10.312 /	6.3	W=	.029480 /	12.0	T=	4.615 /	9.1
LAT= 60.0	U=	9.121 /	4.3	V=	10.253 /	7.0	W=	.024037 /	.5	T=	4.437 /	9.4
LAT= 66.0	U=	7.555 /	4.9	V=	9.725 /	7.6	W=	.023649 /	2.0	T=	3.965 /	10.4
LAT= 72.0	U=	8.537 /	5.2	V=	8.712 /	8.2	W=	.010926 /	1.7	T=	2.317 /	10.0
LAT= 78.0	U=	7.046 /	5.3	V=	6.563 /	8.8	W=	.002979 /	10.4	T=	.741 /	9.1

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 124.175 KM														
LAT=-78.0	U=	4.726	/	1.5	V=	4.123	/	10.9	W=	.003967	/	7.1	T=	.535 / 4.5
LAT=-72.0	U=	6.839	/	1.5	V=	6.324	/	10.7	W=	.005185	/	7.9	T=	.866 / 5.5
LAT=-66.0	U=	8.369	/	1.5	V=	8.277	/	10.5	W=	.006694	/	8.9	T=	1.425 / 6.4
LAT=-60.0	U=	10.256	/	1.5	V=	9.965	/	10.5	W=	.013341	/	8.5	T=	2.354 / 5.8
LAT=-54.0	U=	11.083	/	1.5	V=	11.158	/	10.4	W=	.019985	/	8.3	T=	3.195 / 5.7
LAT=-48.0	U=	11.706	/	1.4	V=	11.692	/	10.4	W=	.030551	/	8.1	T=	4.547 / 5.5
LAT=-42.0	U=	11.731	/	1.5	V=	11.406	/	10.4	W=	.041867	/	8.0	T=	5.961 / 5.2
LAT=-36.0	U=	11.214	/	1.7	V=	10.292	/	10.5	W=	.052879	/	8.0	T=	7.364 / 5.0
LAT=-30.0	U=	10.422	/	1.9	V=	8.434	/	10.8	W=	.061645	/	7.9	T=	8.527 / 4.9
LAT=-24.0	U=	9.397	/	2.0	V=	6.260	/	11.3	W=	.065442	/	7.9	T=	9.099 / 4.9
LAT=-18.0	U=	8.241	/	2.2	V=	4.720	/	.2	W=	.063057	/	7.9	T=	8.923 / 5.0
LAT=-12.0	U=	7.102	/	2.5	V=	4.519	/	1.5	W=	.055675	/	8.0	T=	8.109 / 5.1
LAT= -6.0	U=	5.951	/	2.6	V=	5.336	/	2.4	W=	.044083	/	8.1	T=	6.776 / 5.3
LAT= 0.0	U=	4.992	/	2.7	V=	5.787	/	3.1	W=	.031796	/	8.4	T=	5.385 / 5.7
LAT= 6.0	U=	4.342	/	2.7	V=	5.503	/	3.5	W=	.022044	/	8.6	T=	4.258 / 6.2
LAT= 12.0	U=	4.015	/	2.7	V=	4.687	/	3.8	W=	.017578	/	8.6	T=	3.575 / 6.4
LAT= 18.0	U=	3.885	/	2.8	V=	4.014	/	4.0	W=	.018910	/	8.5	T=	3.348 / 6.5
LAT= 24.0	U=	3.921	/	2.9	V=	3.614	/	3.9	W=	.025525	/	8.4	T=	3.568 / 6.4
LAT= 30.0	U=	4.037	/	2.9	V=	4.198	/	3.9	W=	.033481	/	8.7	T=	4.140 / 6.4
LAT= 36.0	U=	4.429	/	2.8	V=	5.661	/	4.0	W=	.039168	/	9.1	T=	4.786 / 6.7
LAT= 42.0	U=	5.220	/	2.7	V=	7.402	/	4.3	W=	.040508	/	9.8	T=	5.221 / 7.1
LAT= 48.0	U=	6.120	/	2.8	V=	8.647	/	4.8	W=	.039389	/	10.5	T=	5.429 / 7.6
LAT= 54.0	U=	7.205	/	3.1	V=	9.608	/	5.4	W=	.037329	/	11.3	T=	5.572 / 8.2
LAT= 60.0	U=	8.689	/	3.5	V=	9.519	/	5.8	W=	.034662	/	11.7	T=	5.615 / 8.4
LAT= 66.0	U=	6.838	/	4.0	V=	8.875	/	6.5	W=	.031011	/	1.1	T=	4.610 / 9.3
LAT= 72.0	U=	7.690	/	4.1	V=	8.022	/	7.1	W=	.016215	/	.7	T=	2.852 / 8.9
LAT= 78.0	U=	6.434	/	4.2	V=	6.266	/	7.6	W=	.004159	/	10.5	T=	1.112 / 8.1
Z= 129.367 KM														
LAT=-78.0	U=	4.008	/	.7	V=	3.698	/	10.1	W=	.003753	/	6.2	T=	.423 / 4.2
LAT=-72.0	U=	5.820	/	.7	V=	5.555	/	9.9	W=	.005210	/	7.3	T=	.842 / 5.2
LAT=-66.0	U=	7.233	/	.9	V=	7.178	/	9.9	W=	.007973	/	8.3	T=	1.508 / 5.8
LAT=-60.0	U=	8.810	/	.8	V=	8.553	/	9.8	W=	.014759	/	7.9	T=	2.340 / 5.3
LAT=-54.0	U=	9.460	/	.8	V=	9.492	/	9.7	W=	.021467	/	7.7	T=	3.066 / 5.2
LAT=-48.0	U=	10.013	/	.8	V=	9.881	/	9.7	W=	.032078	/	7.5	T=	4.214 / 5.0
LAT=-42.0	U=	10.136	/	.9	V=	9.613	/	9.7	W=	.043346	/	7.4	T=	5.405 / 4.7
LAT=-36.0	U=	9.817	/	1.0	V=	8.692	/	9.8	W=	.054277	/	7.4	T=	6.592 / 4.5
LAT=-30.0	U=	9.361	/	1.2	V=	7.217	/	10.1	W=	.063357	/	7.3	T=	7.645 / 4.4
LAT=-24.0	U=	8.709	/	1.3	V=	5.579	/	10.7	W=	.067996	/	7.3	T=	8.275 / 4.4
LAT=-18.0	U=	7.920	/	1.5	V=	4.583	/	11.6	W=	.067107	/	7.3	T=	8.355 / 4.5
LAT=-12.0	U=	7.089	/	1.8	V=	4.650	/	.7	W=	.061470	/	7.4	T=	7.929 / 4.6
LAT= -6.0	U=	6.179	/	1.9	V=	5.472	/	1.5	W=	.051955	/	7.6	T=	7.088 / 4.8
LAT= 0.0	U=	5.379	/	2.1	V=	6.079	/	2.2	W=	.041575	/	8.0	T=	6.163 / 5.1
LAT= 6.0	U=	4.793	/	2.1	V=	6.131	/	2.6	W=	.032923	/	8.4	T=	5.382 / 5.6
LAT= 12.0	U=	4.467	/	2.2	V=	5.722	/	3.0	W=	.027823	/	8.6	T=	4.863 / 5.9
LAT= 18.0	U=	4.344	/	2.2	V=	5.343	/	3.3	W=	.026769	/	8.7	T=	4.634 / 6.1
LAT= 24.0	U=	4.402	/	2.2	V=	5.010	/	3.5	W=	.029701	/	8.6	T=	4.634 / 6.1
LAT= 30.0	U=	4.560	/	2.2	V=	5.222	/	3.6	W=	.035621	/	8.6	T=	4.898 / 6.2
LAT= 36.0	U=	4.943	/	2.2	V=	6.111	/	3.6	W=	.041401	/	8.9	T=	5.355 / 6.4
LAT= 42.0	U=	5.578	/	2.1	V=	7.385	/	3.8	W=	.044577	/	9.4	T=	5.769 / 6.7
LAT= 48.0	U=	6.309	/	2.2	V=	8.419	/	4.1	W=	.044535	/	10.0	T=	5.968 / 7.1
LAT= 54.0	U=	7.271	/	2.5	V=	9.236	/	4.6	W=	.045384	/	10.8	T=	6.178 / 7.5
LAT= 60.0	U=	8.806	/	2.8	V=	9.257	/	5.0	W=	.046501	/	11.2	T=	6.430 / 7.7
LAT= 66.0	U=	6.804	/	3.1	V=	8.716	/	5.6	W=	.039952	/	.5	T=	4.990 / 8.6
LAT= 72.0	U=	7.419	/	3.2	V=	7.936	/	6.2	W=	.023032	/	12.0	T=	3.245 / 8.1
LAT= 78.0	U=	6.211	/	3.3	V=	6.395	/	6.7	W=	.006843	/	10.4	T=	1.400 / 7.4

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 135.169 KM

LAT=-78.0	U=	3.499	12.0	V=	3.390	9.5	W=	.003101	5.5	T=	.354	4.2
LAT=-72.0	U=	5.114	12.0	V=	4.978	9.3	W=	.005042	6.8	T=	.822	4.9
LAT=-66.0	U=	6.459	.2	V=	6.395	9.1	W=	.009230	7.7	T=	1.526	5.3
LAT=-60.0	U=	7.810	.1	V=	7.552	9.1	W=	.015954	7.3	T=	2.250	4.9
LAT=-54.0	U=	8.330	.1	V=	8.312	9.0	W=	.022569	7.2	T=	2.864	4.7
LAT=-48.0	U=	8.817	.1	V=	8.593	9.0	W=	.032969	7.1	T=	3.812	4.5
LAT=-42.0	U=	8.944	.2	V=	8.307	9.0	W=	.043794	6.9	T=	4.766	4.3
LAT=-36.0	U=	8.745	.4	V=	7.503	9.2	W=	.054363	6.8	T=	5.724	4.1
LAT=-30.0	U=	8.478	.6	V=	6.267	9.5	W=	.063475	6.7	T=	6.625	4.1
LAT=-24.0	U=	8.056	.7	V=	4.997	10.1	W=	.068763	6.7	T=	7.242	4.0
LAT=-18.0	U=	7.516	1.0	V=	4.320	11.0	W=	.069291	6.7	T=	7.492	4.0
LAT=-12.0	U=	6.913	1.2	V=	4.578	12.0	W=	.065328	6.9	T=	7.343	4.1
LAT= -6.0	U=	6.207	1.3	V=	5.413	.8	W=	.058107	7.1	T=	6.915	4.4
LAT= 0.0	U=	5.569	1.5	V=	6.097	1.4	W=	.049871	7.5	T=	6.403	4.7
LAT= 6.0	U=	5.086	1.5	V=	6.356	1.9	W=	.042858	8.0	T=	5.959	5.2
LAT= 12.0	U=	4.807	1.5	V=	6.259	2.3	W=	.038483	8.3	T=	5.668	5.4
LAT= 18.0	U=	4.729	1.6	V=	6.110	2.6	W=	.036556	8.4	T=	5.514	5.6
LAT= 24.0	U=	4.827	1.6	V=	5.942	2.9	W=	.036858	8.5	T=	5.469	5.8
LAT= 30.0	U=	5.038	1.6	V=	6.066	3.1	W=	.039887	8.6	T=	5.559	5.9
LAT= 36.0	U=	5.457	1.5	V=	6.637	3.2	W=	.044498	8.8	T=	5.845	6.1
LAT= 42.0	U=	6.025	1.6	V=	7.541	3.4	W=	.048584	9.1	T=	6.177	6.3
LAT= 48.0	U=	6.663	1.8	V=	8.379	3.7	W=	.049797	9.7	T=	6.302	6.7
LAT= 54.0	U=	7.558	2.0	V=	9.096	4.0	W=	.053150	10.4	T=	6.525	7.1
LAT= 60.0	U=	9.211	2.2	V=	9.227	4.4	W=	.058077	10.7	T=	6.920	7.2
LAT= 66.0	U=	7.104	2.4	V=	8.858	4.9	W=	.048942	11.9	T=	5.172	8.0
LAT= 72.0	U=	7.558	2.5	V=	8.306	5.4	W=	.031094	11.4	T=	3.511	7.5
LAT= 78.0	U=	6.302	2.6	V=	6.840	5.9	W=	.010825	10.2	T=	1.640	6.9

Z= 141.772 KM

LAT=-78.0	U=	3.046	11.4	V=	3.070	8.9	W=	.002273	4.6	T=	.331	4.3
LAT=-72.0	U=	4.505	11.4	V=	4.436	8.7	W=	.004608	6.4	T=	.810	4.6
LAT=-66.0	U=	5.814	11.6	V=	5.690	8.5	W=	.010481	7.2	T=	1.508	4.8
LAT=-60.0	U=	6.956	11.5	V=	6.689	8.5	W=	.017037	6.8	T=	2.136	4.4
LAT=-54.0	U=	7.375	11.5	V=	7.327	8.5	W=	.023444	6.6	T=	2.664	4.3
LAT=-48.0	U=	7.786	11.6	V=	7.538	8.5	W=	.033421	6.4	T=	3.423	4.1
LAT=-42.0	U=	7.920	11.7	V=	7.285	8.5	W=	.043781	6.3	T=	4.194	3.9
LAT=-36.0	U=	7.777	11.8	V=	6.562	8.6	W=	.053723	6.3	T=	4.929	3.7
LAT=-30.0	U=	7.642	12.0	V=	5.564	9.0	W=	.062753	6.2	T=	5.674	3.7
LAT=-24.0	U=	7.385	.1	V=	4.553	9.6	W=	.068557	6.2	T=	6.236	3.6
LAT=-18.0	U=	7.034	.4	V=	4.090	10.5	W=	.070321	6.2	T=	6.567	3.6
LAT=-12.0	U=	6.618	.6	V=	4.400	11.4	W=	.068063	6.4	T=	6.618	3.7
LAT= -6.0	U=	6.096	.7	V=	5.199	.1	W=	.062884	6.7	T=	6.487	4.0
LAT= 0.0	U=	5.622	.9	V=	5.917	.7	W=	.056917	7.1	T=	6.314	4.3
LAT= 6.0	U=	5.257	.9	V=	6.316	1.1	W=	.051910	7.5	T=	6.181	4.7
LAT= 12.0	U=	5.059	1.0	V=	6.397	1.6	W=	.048334	7.9	T=	6.088	5.0
LAT= 18.0	U=	5.043	1.0	V=	6.473	2.0	W=	.046660	8.2	T=	6.062	5.3
LAT= 24.0	U=	5.198	1.0	V=	6.441	2.3	W=	.045429	8.3	T=	6.041	5.5
LAT= 30.0	U=	5.465	1.1	V=	6.606	2.7	W=	.046019	8.5	T=	6.056	5.7
LAT= 36.0	U=	5.939	1.1	V=	7.034	2.8	W=	.049042	8.6	T=	6.230	5.9
LAT= 42.0	U=	6.487	1.1	V=	7.727	2.9	W=	.053057	8.9	T=	6.461	6.1
LAT= 48.0	U=	7.069	1.3	V=	8.392	3.2	W=	.055497	9.5	T=	6.529	6.3
LAT= 54.0	U=	7.916	1.5	V=	9.076	3.5	W=	.060500	10.1	T=	6.685	6.7
LAT= 60.0	U=	9.714	1.7	V=	9.313	3.9	W=	.068494	10.3	T=	7.172	6.8
LAT= 66.0	U=	7.502	1.8	V=	9.106	4.3	W=	.056515	11.5	T=	5.197	7.6
LAT= 72.0	U=	7.892	1.8	V=	8.752	4.8	W=	.038936	11.0	T=	3.676	7.1
LAT= 78.0	U=	6.576	1.9	V=	7.486	5.2	W=	.016292	10.0	T=	1.845	6.5

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 149.425 KM

LAT=-78.0	U=	2.663	10.9	V=	2.775	8.3	W=	.001803	3.6	T=	.313	4.4
LAT=-72.0	U=	3.983	10.9	V=	3.977	8.1	W=	.004541	5.9	T=	.777	4.2
LAT=-66.0	U=	5.273	11.1	V=	5.084	8.1	W=	.011794	6.6	T=	1.463	4.2
LAT=-60.0	U=	6.232	11.0	V=	5.949	8.0	W=	.018305	6.2	T=	2.005	4.0
LAT=-54.0	U=	6.574	11.1	V=	6.481	7.9	W=	.024572	6.1	T=	2.461	3.8
LAT=-48.0	U=	6.928	11.0	V=	6.639	7.9	W=	.034310	5.9	T=	3.085	3.6
LAT=-42.0	U=	7.034	11.1	V=	6.416	8.0	W=	.044191	5.8	T=	3.696	3.4
LAT=-36.0	U=	6.939	11.3	V=	5.821	8.1	W=	.053637	5.6	T=	4.262	3.2
LAT=-30.0	U=	6.881	11.5	V=	4.996	8.5	W=	.062498	5.5	T=	4.861	3.2
LAT=-24.0	U=	6.731	11.6	V=	4.230	9.0	W=	.068625	5.6	T=	5.347	3.0
LAT=-18.0	U=	6.533	11.8	V=	3.899	9.9	W=	.071384	5.7	T=	5.684	3.2
LAT=-12.0	U=	6.252	11.9	V=	4.223	10.8	W=	.070463	5.8	T=	5.875	3.3
LAT= -6.0	U=	5.897	.1	V=	4.951	11.5	W=	.067162	6.2	T=	5.927	3.5
LAT= 0.0	U=	5.581	.3	V=	5.640	.1	W=	.063152	6.6	T=	6.024	4.0
LAT= 6.0	U=	5.340	.3	V=	6.096	.5	W=	.059815	7.1	T=	6.131	4.4
LAT= 12.0	U=	5.236	.3	V=	6.312	1.0	W=	.057683	7.5	T=	6.238	4.7
LAT= 18.0	U=	5.292	.4	V=	6.491	1.5	W=	.056136	7.8	T=	6.340	5.0
LAT= 24.0	U=	5.511	.5	V=	6.609	1.8	W=	.054456	8.1	T=	6.380	5.2
LAT= 30.0	U=	5.827	.6	V=	6.828	2.2	W=	.053281	8.3	T=	6.382	5.4
LAT= 36.0	U=	6.359	.6	V=	7.214	2.4	W=	.054641	8.5	T=	6.495	5.7
LAT= 42.0	U=	6.917	.7	V=	7.766	2.6	W=	.058244	8.8	T=	6.662	5.8
LAT= 48.0	U=	7.464	.9	V=	8.396	2.9	W=	.061612	9.2	T=	6.664	6.1
LAT= 54.0	U=	8.274	1.1	V=	9.040	3.1	W=	.067348	9.7	T=	6.735	6.4
LAT= 60.0	U=	10.204	1.2	V=	9.410	3.5	W=	.077546	9.9	T=	7.256	6.4
LAT= 66.0	U=	7.910	1.3	V=	9.357	3.8	W=	.062388	11.0	T=	5.121	7.2
LAT= 72.0	U=	8.267	1.4	V=	9.167	4.3	W=	.045862	10.5	T=	3.756	6.7
LAT= 78.0	U=	6.928	1.4	V=	8.077	4.7	W=	.021692	9.7	T=	2.012	6.1

Z= 158.420 KM

LAT=-78.0	U=	2.346	10.5	V=	2.511	7.8	W=	.001586	3.1	T=	.291	4.2
LAT=-72.0	U=	3.554	10.5	V=	3.573	7.6	W=	.004960	5.5	T=	.728	3.8
LAT=-66.0	U=	4.795	10.6	V=	4.555	7.6	W=	.013406	6.1	T=	1.411	3.6
LAT=-60.0	U=	5.611	10.5	V=	5.302	7.5	W=	.020083	5.6	T=	1.890	3.4
LAT=-54.0	U=	5.892	10.6	V=	5.747	7.5	W=	.026306	5.6	T=	2.293	3.3
LAT=-48.0	U=	6.193	10.6	V=	5.868	7.5	W=	.036020	5.4	T=	2.824	3.1
LAT=-42.0	U=	6.295	10.6	V=	5.677	7.5	W=	.045634	5.3	T=	3.319	2.9
LAT=-36.0	U=	6.214	10.7	V=	5.193	7.6	W=	.054675	5.1	T=	3.750	2.7
LAT=-30.0	U=	6.209	10.9	V=	4.550	8.0	W=	.063382	5.0	T=	4.218	2.7
LAT=-24.0	U=	6.128	11.1	V=	3.975	8.6	W=	.069701	5.0	T=	4.605	2.6
LAT=-18.0	U=	6.031	11.3	V=	3.813	9.4	W=	.072999	5.2	T=	4.920	2.7
LAT=-12.0	U=	5.865	11.4	V=	4.103	10.2	W=	.073277	5.4	T=	5.140	2.9
LAT= -6.0	U=	5.647	11.6	V=	4.746	10.8	W=	.071103	5.6	T=	5.336	3.1
LAT= 0.0	U=	5.471	11.7	V=	5.370	11.4	W=	.068866	6.2	T=	5.616	3.6
LAT= 6.0	U=	5.348	11.7	V=	5.825	11.8	W=	.067050	6.7	T=	5.929	4.0
LAT= 12.0	U=	5.333	11.8	V=	6.053	.4	W=	.066079	7.1	T=	6.190	4.4
LAT= 18.0	U=	5.465	11.9	V=	6.322	.9	W=	.065063	7.4	T=	6.416	4.7
LAT= 24.0	U=	5.741	12.0	V=	6.484	1.3	W=	.063057	7.8	T=	6.537	5.0
LAT= 30.0	U=	6.101	.1	V=	6.756	1.7	W=	.060856	8.1	T=	6.557	5.2
LAT= 36.0	U=	6.695	.1	V=	7.128	2.0	W=	.060853	8.3	T=	6.667	5.4
LAT= 42.0	U=	7.277	.3	V=	7.643	2.2	W=	.064190	8.5	T=	6.775	5.6
LAT= 48.0	U=	7.820	.5	V=	8.225	2.5	W=	.067461	8.9	T=	6.752	5.9
LAT= 54.0	U=	8.599	.7	V=	8.932	2.8	W=	.074092	9.3	T=	6.714	6.1
LAT= 60.0	U=	10.647	.8	V=	9.448	3.2	W=	.085339	9.5	T=	7.233	6.2
LAT= 66.0	U=	8.330	.9	V=	9.543	3.5	W=	.066160	10.6	T=	5.002	6.9
LAT= 72.0	U=	8.641	.9	V=	9.513	3.9	W=	.050680	10.2	T=	3.769	6.4
LAT= 78.0	U=	7.259	.9	V=	8.521	4.2	W=	.025698	9.6	T=	2.141	5.8

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 181.310 KM

LAT=-78.0	U=	1.877 /	9.6	V=	2.046 /	6.9	W=	.001329 /	3.8	T=	.246 /	3.3
LAT=-72.0	U=	2.887 /	9.6	V=	2.877 /	6.7	W=	.007052 /	4.8	T=	.665 /	2.7
LAT=-66.0	U=	3.978 /	9.7	V=	3.651 /	6.7	W=	.017666 /	5.0	T=	1.344 /	2.5
LAT=-60.0	U=	4.585 /	9.7	V=	4.216 /	6.6	W=	.024930 /	4.7	T=	1.761 /	2.4
LAT=-54.0	U=	4.780 /	9.7	V=	4.534 /	6.6	W=	.031364 /	4.7	T=	2.092 /	2.3
LAT=-48.0	U=	5.008 /	9.7	V=	4.611 /	6.6	W=	.041139 /	4.4	T=	2.524 /	2.1
LAT=-42.0	U=	5.081 /	9.7	V=	4.488 /	6.7	W=	.050648 /	4.3	T=	2.864 /	2.0
LAT=-36.0	U=	5.011 /	9.8	V=	4.205 /	6.9	W=	.058935 /	4.2	T=	3.101 /	1.8
LAT=-30.0	U=	5.032 /	10.0	V=	3.881 /	7.3	W=	.067437 /	4.1	T=	3.347 /	1.8
LAT=-24.0	U=	5.011 /	10.1	V=	3.691 /	7.8	W=	.073847 /	4.1	T=	3.533 /	1.8
LAT=-18.0	U=	5.003 /	10.3	V=	3.785 /	8.5	W=	.078115 /	4.2	T=	3.715 /	2.0
LAT=-12.0	U=	4.978 /	10.4	V=	4.121 /	9.1	W=	.079318 /	4.4	T=	3.913 /	2.2
LAT= -6.0	U=	4.946 /	10.6	V=	4.607 /	9.6	W=	.079327 /	4.7	T=	4.220 /	2.6
LAT= 0.0	U=	4.989 /	10.8	V=	5.057 /	10.2	W=	.078916 /	5.1	T=	4.711 /	3.0
LAT= 6.0	U=	5.052 /	10.8	V=	5.356 /	10.6	W=	.079318 /	5.7	T=	5.284 /	3.4
LAT= 12.0	U=	5.192 /	10.9	V=	5.489 /	11.2	W=	.080123 /	6.2	T=	5.794 /	3.9
LAT= 18.0	U=	5.463 /	11.0	V=	5.647 /	11.7	W=	.080451 /	6.7	T=	6.211 /	4.2
LAT= 24.0	U=	5.858 /	11.1	V=	5.765 /	.2	W=	.078455 /	7.1	T=	6.476 /	4.5
LAT= 30.0	U=	6.327 /	11.3	V=	6.018 /	.8	W=	.074941 /	7.4	T=	6.587 /	4.8
LAT= 36.0	U=	7.068 /	11.4	V=	6.362 /	1.2	W=	.072997 /	7.7	T=	6.733 /	5.1
LAT= 42.0	U=	7.807 /	11.5	V=	6.810 /	1.6	W=	.074885 /	8.0	T=	6.857 /	5.3
LAT= 48.0	U=	8.365 /	11.7	V=	7.462 /	2.0	W=	.079076 /	8.3	T=	6.751 /	5.5
LAT= 54.0	U=	9.181 /	12.0	V=	8.370 /	2.3	W=	.086290 /	8.6	T=	6.577 /	5.7
LAT= 60.0	U=	11.422 /	.1	V=	9.248 /	2.6	W=	.099235 /	8.7	T=	7.029 /	5.6
LAT= 66.0	U=	9.254 /	.1	V=	9.744 /	2.9	W=	.072243 /	9.7	T=	4.677 /	6.3
LAT= 72.0	U=	9.402 /	.1	V=	9.973 /	3.2	W=	.055733 /	9.4	T=	3.695 /	5.9
LAT= 78.0	U=	7.798 /	.2	V=	9.060 /	3.5	W=	.027443 /	9.2	T=	2.247 /	5.5

Z= 209.865 KM

LAT=-78.0	U=	1.565 /	9.0	V=	1.677 /	6.0	W=	.002271 /	4.6	T=	.247 /	2.5
LAT=-72.0	U=	2.420 /	9.0	V=	2.348 /	6.0	W=	.009438 /	4.3	T=	.659 /	2.1
LAT=-66.0	U=	3.347 /	9.0	V=	2.966 /	5.9	W=	.022052 /	4.2	T=	1.319 /	1.8
LAT=-60.0	U=	3.807 /	8.9	V=	.400 /	5.9	W=	.029811 /	4.0	T=	1.712 /	1.7
LAT=-54.0	U=	3.926 /	9.0	V=	3.625 /	6.0	W=	.036403 /	3.9	T=	2.000 /	1.7
LAT=-48.0	U=	4.080 /	9.0	V=	3.661 /	6.1	W=	.046184 /	3.7	T=	2.373 /	1.5
LAT=-42.0	U=	4.091 /	9.0	V=	3.588 /	6.3	W=	.055122 /	3.6	T=	2.632 /	1.4
LAT=-36.0	U=	3.972 /	9.1	V=	3.430 /	6.5	W=	.062931 /	3.4	T=	2.752 /	1.4
LAT=-30.0	U=	3.934 /	9.3	V=	3.340 /	6.9	W=	.071347 /	3.4	T=	2.859 /	1.4
LAT=-24.0	U=	3.887 /	9.4	V=	3.440 /	7.3	W=	.078254 /	3.2	T=	2.909 /	1.4
LAT=-18.0	U=	3.887 /	9.6	V=	3.744 /	7.9	W=	.083406 /	3.4	T=	2.987 /	1.5
LAT=-12.0	U=	3.928 /	9.8	V=	4.202 /	8.4	W=	.086084 /	3.6	T=	3.134 /	1.8
LAT= -6.0	U=	4.018 /	9.9	V=	4.658 /	8.8	W=	.086748 /	3.8	T=	3.480 /	2.3
LAT= 0.0	U=	4.195 /	10.0	V=	5.018 /	9.3	W=	.087213 /	4.3	T=	4.066 /	2.7
LAT= 6.0	U=	4.403 /	10.0	V=	5.190 /	9.7	W=	.088203 /	4.9	T=	4.780 /	3.1
LAT= 12.0	U=	4.672 /	10.2	V=	5.159 /	10.2	W=	.090275 /	5.4	T=	5.426 /	3.6
LAT= 18.0	U=	5.081 /	10.3	V=	5.112 /	10.7	W=	.090297 /	5.9	T=	5.959 /	3.9
LAT= 24.0	U=	5.636 /	10.5	V=	5.063 /	11.3	W=	.088702 /	6.4	T=	6.324 /	4.2
LAT= 30.0	U=	6.273 /	10.7	V=	5.180 /	12.0	W=	.084343 /	6.8	T=	6.506 /	4.5
LAT= 36.0	U=	7.232 /	10.8	V=	5.454 /	.5	W=	.080455 /	7.1	T=	6.704 /	4.8
LAT= 42.0	U=	8.155 /	11.0	V=	5.836 /	1.1	W=	.080109 /	7.4	T=	6.859 /	5.0
LAT= 48.0	U=	8.817 /	11.2	V=	6.624 /	1.6	W=	.083377 /	7.7	T=	6.725 /	5.2
LAT= 54.0	U=	9.654 /	11.5	V=	7.696 /	1.9	W=	.091128 /	8.0	T=	6.472 /	5.4
LAT= 60.0	U=	12.027 /	11.6	V=	8.912 /	2.3	W=	.105445 /	8.1	T=	6.863 /	5.3
LAT= 66.0	U=	10.027 /	11.7	V=	9.810 /	2.5	W=	.075908 /	8.9	T=	4.466 /	5.9
LAT= 72.0	U=	10.059 /	11.7	V=	10.285 /	2.7	W=	.054552 /	8.7	T=	3.606 /	5.6
LAT= 78.0	U=	8.192 /	11.7	V=	9.277 /	3.0	W=	.021498 /	8.9	T=	2.252 /	5.3

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 240.988 KM

LAT=-78.0	U=	1.392	8.5	V=	1.470	5.3	W=	.003199	4.4	T=	.259	1.9
LAT=-72.0	U=	2.157	8.4	V=	2.041	5.3	W=	.011222	3.9	T=	.672	1.6
LAT=-66.0	U=	2.984	8.4	V=	2.560	5.4	W=	.025361	3.7	T=	1.314	1.4
LAT=-60.0	U=	3.352	8.4	V=	2.910	5.4	W=	.033342	3.5	T=	1.693	1.4
LAT=-54.0	U=	3.421	8.5	V=	3.069	5.5	W=	.040057	3.4	T=	1.958	1.4
LAT=-48.0	U=	3.512	8.4	V=	3.081	5.6	W=	.049538	3.2	T=	2.307	1.3
LAT=-42.0	U=	3.462	8.4	V=	3.002	5.9	W=	.058054	3.1	T=	2.523	1.2
LAT=-36.0	U=	3.276	8.5	V=	2.928	6.3	W=	.065456	2.9	T=	2.588	1.2
LAT=-30.0	U=	3.157	8.7	V=	2.957	6.7	W=	.074191	2.8	T=	2.631	1.2
LAT=-24.0	U=	3.060	8.8	V=	3.210	7.2	W=	.082037	2.6	T=	2.617	1.2
LAT=-18.0	U=	3.040	9.1	V=	3.680	7.6	W=	.088704	2.8	T=	2.637	1.4
LAT=-12.0	U=	3.124	9.2	V=	4.213	7.9	W=	.092744	3.0	T=	2.772	1.7
LAT= -6.0	U=	3.280	9.3	V=	4.727	8.3	W=	.094399	3.2	T=	3.125	2.2
LAT= 0.0	U=	3.542	9.4	V=	5.086	8.7	W=	.094852	3.8	T=	3.758	2.6
LAT= 6.0	U=	3.860	9.5	V=	5.205	9.1	W=	.095130	4.3	T=	4.535	3.1
LAT= 12.0	U=	4.236	9.7	V=	5.112	9.5	W=	.096649	4.8	T=	5.279	3.4
LAT= 18.0	U=	4.764	9.9	V=	4.676	10.1	W=	.096173	5.3	T=	5.828	3.7
LAT= 24.0	U=	5.456	10.0	V=	4.700	10.7	W=	.093346	5.8	T=	6.280	4.1
LAT= 30.0	U=	6.266	10.3	V=	4.680	11.5	W=	.087639	6.2	T=	6.497	4.4
LAT= 36.0	U=	7.414	10.5	V=	4.888	.1	W=	.080658	6.6	T=	6.729	4.7
LAT= 42.0	U=	8.494	10.7	V=	5.254	.8	W=	.076151	6.9	T=	6.907	4.9
LAT= 48.0	U=	9.214	10.9	V=	6.091	1.3	W=	.076665	7.2	T=	6.764	5.1
LAT= 54.0	U=	10.040	11.2	V=	7.310	1.8	W=	.083415	7.5	T=	6.473	5.3
LAT= 60.0	U=	12.471	11.3	V=	8.701	2.1	W=	.097954	7.6	T=	6.839	5.2
LAT= 66.0	U=	10.541	11.4	V=	9.854	2.3	W=	.070511	8.5	T=	4.409	5.8
LAT= 72.0	U=	10.510	11.4	V=	10.486	[illegible]	W=	.045829	8.1	T=	3.574	5.5
LAT= 78.0	U=	8.471	11.4	V=	9.427		W=	.010125	8.3	T=	2.265	5.3

Z= 272.801 KM

LAT=-78.0	U=	1.324	8.1	V=	1.392	4.9	W=	.003735	4.3	T=	.267	1.7
LAT=-72.0	U=	2.053	8.1	V=	1.909	5.0	W=	.012327	3.6	T=	.683	1.5
LAT=-66.0	U=	2.841	8.1	V=	2.377	5.1	W=	.027502	3.4	T=	1.314	1.3
LAT=-60.0	U=	3.164	8.0	V=	2.682	5.1	W=	.035609	3.2	T=	1.689	1.2
LAT=-54.0	U=	3.204	8.1	V=	2.803	5.2	W=	.042497	3.1	T=	1.945	1.3
LAT=-48.0	U=	3.266	8.1	V=	2.783	5.4	W=	.051641	2.9	T=	2.279	1.1
LAT=-42.0	U=	3.175	8.1	V=	2.716	5.7	W=	.060026	2.7	T=	2.481	1.0
LAT=-36.0	U=	2.941	8.2	V=	2.659	6.1	W=	.067320	2.5	T=	2.522	1.1
LAT=-30.0	U=	2.764	8.4	V=	2.759	6.6	W=	.076615	2.4	T=	2.537	1.1
LAT=-24.0	U=	2.631	8.5	V=	3.101	7.0	W=	.085553	2.2	T=	2.494	1.1
LAT=-18.0	U=	2.610	8.7	V=	3.642	7.4	W=	.093836	2.4	T=	2.491	1.3
LAT=-12.0	U=	2.702	8.9	V=	4.232	7.7	W=	.099443	2.6	T=	2.617	1.6
LAT= -6.0	U=	2.909	9.0	V=	4.798	8.0	W=	.102538	2.8	T=	2.971	2.1
LAT= 0.0	U=	3.225	9.1	V=	5.164	8.3	W=	.102965	3.3	T=	3.631	2.6
LAT= 6.0	U=	3.623	9.1	V=	5.279	8.7	W=	.102159	3.8	T=	4.453	3.0
LAT= 12.0	U=	4.078	9.3	V=	5.151	9.1	W=	.102378	4.3	T=	5.196	3.4
LAT= 18.0	U=	4.678	9.5	V=	4.851	9.7	W=	.100943	4.8	T=	5.821	3.7
LAT= 24.0	U=	5.474	9.7	V=	4.578	10.3	W=	.096765	5.1	T=	6.275	4.0
LAT= 30.0	U=	6.393	10.0	V=	4.460	11.1	W=	.087821	5.5	T=	6.520	4.3
LAT= 36.0	U=	7.657	10.3	V=	4.619	11.8	W=	.077326	5.9	T=	6.765	4.7
LAT= 42.0	U=	8.830	10.5	V=	4.974	.5	W=	.066960	6.3	T=	6.954	4.9
LAT= 48.0	U=	9.569	10.7	V=	5.843	1.2	W=	.063993	6.7	T=	6.822	5.0
LAT= 54.0	U=	10.361	11.0	V=	7.165	1.7	W=	.068853	6.9	T=	6.502	5.2
LAT= 60.0	U=	12.816	11.2	V=	8.633	2.0	W=	.082737	7.0	T=	6.863	5.1
LAT= 66.0	U=	10.887	11.3	V=	9.925	2.2	W=	.058096	8.1	T=	4.408	5.7
LAT= 72.0	U=	10.815	11.3	V=	10.660	2.4	W=	.034002	7.4	T=	3.576	5.4
LAT= 78.0	U=	8.668	11.3	V=	9.554	2.7	W=	.004405	3.8	T=	2.280	5.2

Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 304.762 KM

LAT=-78.0	U=	1.308	/	7.9	V=	1.377	/	4.7	W=	.003925	/	4.1	T=	.273	/	1.5
LAT=-72.0	U=	2.030	/	7.8	V=	1.869	/	4.8	W=	.012795	/	3.4	T=	.690	/	1.4
LAT=-66.0	U=	2.813	/	7.8	V=	2.314	/	4.9	W=	.028637	/	3.1	T=	1.320	/	1.2
LAT=-60.0	U=	3.116	/	7.8	V=	2.598	/	4.9	W=	.036817	/	2.9	T=	1.693	/	1.1
LAT=-54.0	U=	3.144	/	7.9	V=	2.693	/	5.1	W=	.043785	/	2.8	T=	1.945	/	1.2
LAT=-48.0	U=	3.191	/	7.9	V=	2.665	/	5.2	W=	.052908	/	2.6	T=	2.278	/	1.1
LAT=-42.0	U=	3.078	/	7.9	V=	2.581	/	5.5	W=	.061013	/	2.4	T=	2.469	/	1.0
LAT=-36.0	U=	2.815	/	8.0	V=	2.553	/	6.0	W=	.068731	/	2.2	T=	2.501	/	1.0
LAT=-30.0	U=	2.606	/	8.1	V=	2.684	/	6.5	W=	.078789	/	2.1	T=	2.504	/	1.0
LAT=-24.0	U=	2.452	/	8.3	V=	3.069	/	6.9	W=	.088887	/	2.0	T=	2.451	/	1.0
LAT=-18.0	U=	2.429	/	8.5	V=	3.640	/	7.3	W=	.098882	/	2.1	T=	2.431	/	1.3
LAT=-12.0	U=	2.537	/	8.6	V=	4.273	/	7.6	W=	.106095	/	2.3	T=	2.563	/	1.7
LAT= -6.0	U=	2.769	/	8.7	V=	4.847	/	7.8	W=	.111010	/	2.5	T=	2.918	/	2.1
LAT= 0.0	U=	3.127	/	8.9	V=	5.230	/	8.1	W=	.111731	/	2.9	T=	3.589	/	2.6
LAT= 6.0	U=	3.582	/	8.9	V=	5.354	/	8.5	W=	.109773	/	3.4	T=	4.421	/	3.0
LAT= 12.0	U=	4.081	/	9.1	V=	5.218	/	8.9	W=	.109554	/	3.8	T=	5.210	/	3.3
LAT= 18.0	U=	4.741	/	9.4	V=	4.890	/	9.5	W=	.105466	/	4.3	T=	5.808	/	3.6
LAT= 24.0	U=	5.589	/	9.6	V=	4.567	/	10.1	W=	.098759	/	4.7	T=	6.306	/	4.0
LAT= 30.0	U=	6.572	/	9.9	V=	4.383	/	10.9	W=	.088123	/	5.0	T=	6.557	/	4.3
LAT= 36.0	U=	7.917	/	10.1	V=	4.498	/	11.7	W=	.075046	/	5.2	T=	6.817	/	4.6
LAT= 42.0	U=	9.111	/	10.3	V=	4.855	/	.4	W=	.060293	/	5.4	T=	7.014	/	4.8
LAT= 48.0	U=	9.869	/	10.6	V=	5.750	/	1.1	W=	.053232	/	5.7	T=	6.865	/	5.0
LAT= 54.0	U=	10.624	/	10.9	V=	7.136	/	1.6	W=	.056284	/	6.0	T=	6.547	/	5.2
LAT= 60.0	U=	13.089	/	11.1	V=	8.649	/	1.9	W=	.068836	/	6.2	T=	6.902	/	5.1
LAT= 66.0	U=	11.139	/	11.2	V=	10.018	/	2.1	W=	.042258	/	7.6	T=	4.425	/	5.7
LAT= 72.0	U=	11.045	/	11.2	V=	10.817	/	2.3	W=	.025486	/	6.1	T=	3.591	/	5.4
LAT= 78.0	U=	8.802	/	11.2	V=	9.673	/	2.6	W=	.019199	/	2.9	T=	2.295	/	5.2

Z= 336.754 KM

LAT=-78.0	U=	1.315	/	7.8	V=	1.386	/	4.6	W=	.003788	/	4.1	T=	.279	/	1.6
LAT=-72.0	U=	2.040	/	7.7	V=	1.867	/	4.7	W=	.012859	/	3.2	T=	.696	/	1.3
LAT=-66.0	U=	2.829	/	7.7	V=	2.303	/	4.8	W=	.028857	/	2.9	T=	1.330	/	1.1
LAT=-60.0	U=	3.125	/	7.7	V=	2.580	/	4.8	W=	.037037	/	2.7	T=	1.704	/	1.1
LAT=-54.0	U=	3.147	/	7.8	V=	2.664	/	5.0	W=	.044087	/	2.6	T=	1.955	/	1.2
LAT=-48.0	U=	3.186	/	7.7	V=	2.616	/	5.2	W=	.052914	/	2.4	T=	2.287	/	1.1
LAT=-42.0	U=	3.064	/	7.7	V=	2.546	/	5.5	W=	.061437	/	2.2	T=	2.476	/	1.0
LAT=-36.0	U=	2.783	/	7.8	V=	2.509	/	5.9	W=	.069543	/	2.0	T=	2.505	/	1.0
LAT=-30.0	U=	2.559	/	8.0	V=	2.670	/	6.5	W=	.080654	/	1.9	T=	2.503	/	1.0
LAT=-24.0	U=	2.396	/	8.1	V=	3.076	/	6.9	W=	.092029	/	1.8	T=	2.442	/	1.0
LAT=-18.0	U=	2.371	/	8.3	V=	3.676	/	7.2	W=	.103795	/	1.8	T=	2.430	/	1.2
LAT=-12.0	U=	2.486	/	8.5	V=	4.308	/	7.5	W=	.112844	/	2.0	T=	2.540	/	1.6
LAT= -6.0	U=	2.741	/	8.6	V=	4.846	/	7.7	W=	.119477	/	2.2	T=	2.919	/	2.1
LAT= 0.0	U=	3.125	/	8.7	V=	5.245	/	8.0	W=	.121025	/	2.7	T=	3.588	/	2.5
LAT= 6.0	U=	3.613	/	8.8	V=	5.418	/	8.4	W=	.118717	/	3.1	T=	4.429	/	3.0
LAT= 12.0	U=	4.147	/	9.0	V=	5.295	/	8.8	W=	.117112	/	3.5	T=	5.235	/	3.3
LAT= 18.0	U=	4.841	/	9.3	V=	4.935	/	9.4	W=	.112319	/	3.8	T=	5.844	/	3.6
LAT= 24.0	U=	5.724	/	9.5	V=	4.594	/	10.0	W=	.103636	/	4.2	T=	6.351	/	4.0
LAT= 30.0	U=	6.741	/	9.8	V=	4.370	/	10.8	W=	.091688	/	4.4	T=	6.669	/	4.3
LAT= 36.0	U=	8.109	/	10.1	V=	4.476	/	11.6	W=	.076947	/	4.5	T=	6.875	/	4.6
LAT= 42.0	U=	9.348	/	10.3	V=	4.748	/	.4	W=	.060689	/	4.3	T=	7.076	/	4.8
LAT= 48.0	U=	10.083	/	10.5	V=	5.791	/	1.1	W=	.050682	/	4.4	T=	6.925	/	5.0
LAT= 54.0	U=	10.830	/	10.8	V=	7.193	/	1.6	W=	.053785	/	4.8	T=	6.601	/	5.2
LAT= 60.0	U=	13.308	/	11.0	V=	8.704	/	1.9	W=	.067939	/	5.0	T=	6.956	/	5.1
LAT= 66.0	U=	11.324	/	11.2	V=	10.119	/	2.1	W=	.039246	/	6.4	T=	4.457	/	5.7
LAT= 72.0	U=	11.206	/	11.1	V=	10.957	/	2.3	W=	.029974	/	4.5	T=	3.616	/	5.4
LAT= 78.0	U=	8.928	/	11.1	V=	9.763	/	2.6	W=	.035515	/	2.6	T=	2.314	/	5.2

AD-A125 720 A COMPENDIUM OF THEORETICAL ATMOSPHERIC TIDAL STRUCTURES PART I MODEL DES..(U) AIR FORCE GEOPHYSICS LAB HANSCOM AFB MA J M FORBES ET AL. 24 JUN 82 3/3

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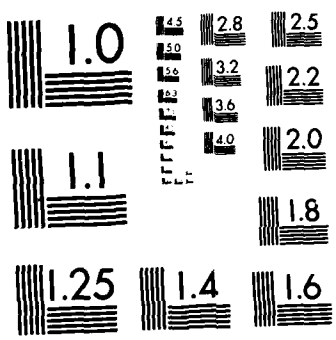


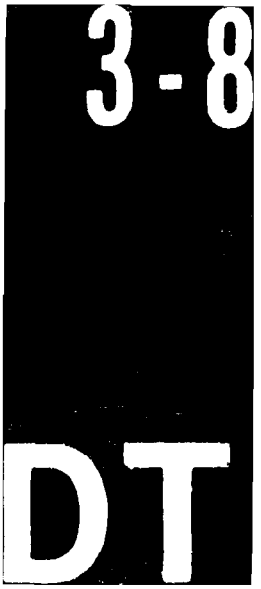
Table B6. Amplitude and Phase of Lunar Semidiurnal Variations in Westerly, Northerly, and Vertical Winds, and Temperature, at Latitudes From 78°S to 78°N in 6° Increments, for Altitudes From Sea Level to 400 km, at the December Solstice (Contd)

Z= 368.753 KM

LAT=-78.0	U=	1.328	7.8	V=	1.401	4.5	W=	.003277	4.0	T=	.283	1.6
LAT=-72.0	U=	2.058	7.7	V=	1.878	4.6	W=	.012054	3.0	T=	.703	1.3
LAT=-66.0	U=	2.858	7.6	V=	2.313	4.7	W=	.028233	2.7	T=	1.342	1.1
LAT=-60.0	U=	3.153	7.6	V=	2.589	4.7	W=	.036350	2.5	T=	1.719	1.1
LAT=-54.0	U=	3.172	7.7	V=	2.666	4.9	W=	.043382	2.4	T=	1.972	1.1
LAT=-48.0	U=	3.210	7.7	V=	2.616	5.1	W=	.052247	2.2	T=	2.305	1.0
LAT=-42.0	U=	3.080	7.7	V=	2.535	5.4	W=	.060973	1.9	T=	2.496	1.0
LAT=-36.0	U=	2.792	7.8	V=	2.517	5.9	W=	.070019	1.7	T=	2.522	1.0
LAT=-30.0	U=	2.557	7.9	V=	2.682	6.4	W=	.082280	1.6	T=	2.518	1.0
LAT=-24.0	U=	2.386	8.1	V=	3.098	6.9	W=	.095040	1.5	T=	2.454	1.0
LAT=-18.0	U=	2.364	8.3	V=	3.713	7.2	W=	.108516	1.6	T=	2.440	1.2
LAT=-12.0	U=	2.485	8.5	V=	4.352	7.5	W=	.119584	1.8	T=	2.551	1.6
LAT= -6.0	U=	2.753	8.6	V=	4.944	7.7	W=	.128407	2.0	T=	2.933	2.1
LAT= 0.0	U=	3.155	8.7	V=	5.335	8.0	W=	.130751	2.4	T=	3.612	2.5
LAT= 6.0	U=	3.664	8.8	V=	5.481	8.3	W=	.128205	2.8	T=	4.461	3.0
LAT= 12.0	U=	4.226	9.0	V=	5.347	8.7	W=	.126007	3.2	T=	5.278	3.3
LAT= 18.0	U=	4.933	9.2	V=	5.001	9.3	W=	.121776	3.5	T=	5.896	3.6
LAT= 24.0	U=	5.836	9.4	V=	4.624	9.9	W=	.112234	3.7	T=	6.410	4.0
LAT= 30.0	U=	6.880	9.8	V=	4.387	10.8	W=	.100989	3.9	T=	6.673	4.3
LAT= 36.0	U=	8.271	10.1	V=	4.469	11.6	W=	.092123	3.8	T=	6.943	4.6
LAT= 42.0	U=	9.523	10.3	V=	4.847	.3	W=	.083237	3.6	T=	7.147	4.8
LAT= 48.0	U=	10.256	10.5	V=	5.732	1.0	W=	.077761	3.6	T=	6.995	5.0
LAT= 54.0	U=	10.995	10.8	V=	7.224	1.6	W=	.077570	3.9	T=	6.666	5.2
LAT= 60.0	U=	13.490	11.0	V=	8.777	1.9	W=	.085914	4.1	T=	7.023	5.1
LAT= 66.0	U=	11.482	11.2	V=	10.215	2.1	W=	.031983	4.7	T=	4.498	5.7
LAT= 72.0	U=	11.351	11.1	V=	11.113	2.2	W=	.046569	3.7	T=	3.650	5.4
LAT= 78.0	U=	9.035	11.1	V=	9.846	2.5	W=	.050979	2.6	T=	2.337	5.2

Z= 400.753 KM

LAT=-78.0	U=	1.342	7.7	V=	1.418	4.5	W=	.002485	3.7	T=	.287	1.6
LAT=-72.0	U=	2.083	7.6	V=	1.896	4.6	W=	.011060	2.7	T=	.711	1.3
LAT=-66.0	U=	2.889	7.6	V=	2.332	4.7	W=	.026832	2.5	T=	1.355	1.1
LAT=-60.0	U=	3.186	7.6	V=	2.609	4.7	W=	.034835	2.3	T=	1.736	1.1
LAT=-54.0	U=	3.204	7.7	V=	2.683	4.9	W=	.041878	2.2	T=	1.991	1.1
LAT=-48.0	U=	3.240	7.6	V=	2.629	5.1	W=	.050667	1.9	T=	2.328	1.0
LAT=-42.0	U=	3.108	7.6	V=	2.547	5.4	W=	.060271	1.7	T=	2.519	1.0
LAT=-36.0	U=	2.813	7.7	V=	2.532	5.9	W=	.070203	1.5	T=	2.545	1.0
LAT=-30.0	U=	2.572	7.9	V=	2.703	6.4	W=	.083754	1.4	T=	2.540	1.0
LAT=-24.0	U=	2.400	8.0	V=	3.125	6.9	W=	.097832	1.3	T=	2.474	1.0
LAT=-18.0	U=	2.377	8.2	V=	3.756	7.2	W=	.112995	1.4	T=	2.460	1.2
LAT=-12.0	U=	2.502	8.4	V=	4.391	7.4	W=	.126033	1.6	T=	2.571	1.6
LAT= -6.0	U=	2.777	8.5	V=	4.986	7.6	W=	.136996	1.8	T=	2.958	2.1
LAT= 0.0	U=	3.192	8.6	V=	5.384	8.0	W=	.140634	2.2	T=	3.644	2.5
LAT= 6.0	U=	3.718	8.7	V=	5.535	8.3	W=	.138561	2.5	T=	4.502	3.0
LAT= 12.0	U=	4.287	8.9	V=	5.404	8.7	W=	.137313	2.8	T=	5.329	3.3
LAT= 18.0	U=	5.017	9.2	V=	5.054	9.3	W=	.133523	3.1	T=	5.954	3.6
LAT= 24.0	U=	5.930	9.4	V=	4.678	9.9	W=	.125570	3.3	T=	6.475	4.0
LAT= 30.0	U=	6.989	9.8	V=	4.417	10.7	W=	.116646	3.4	T=	6.741	4.3
LAT= 36.0	U=	8.410	10.0	V=	4.482	11.6	W=	.113513	3.3	T=	7.014	4.6
LAT= 42.0	U=	9.652	10.2	V=	4.874	.3	W=	.111181	3.1	T=	7.221	4.8
LAT= 48.0	U=	10.407	10.5	V=	5.772	1.0	W=	.108449	3.1	T=	7.067	5.0
LAT= 54.0	U=	11.133	10.8	V=	7.287	1.6	W=	.107453	3.4	T=	6.735	5.2
LAT= 60.0	U=	13.647	11.0	V=	8.857	1.9	W=	.115858	3.6	T=	7.095	5.1
LAT= 66.0	U=	11.616	11.2	V=	10.317	2.1	W=	.050902	3.8	T=	4.551	5.6
LAT= 72.0	U=	11.478	11.1	V=	11.232	2.2	W=	.066113	3.3	T=	3.697	5.4
LAT= 78.0	U=	9.132	11.1	V=	9.948	2.5	W=	.067232	2.5	T=	2.355	5.2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DT